



## Health Status of Missouri Women Introduction

**Health Status of Missouri Women** is a series of fact sheets that identify the major health issues affecting Missouri women. The fact sheets are designed to promote the health and well-being of Missouri's girls and women by enhancing the visibility and prominence of women's health issues. They were prepared for those with an interest in women's health issues, including policy makers, educators, health care providers, planners, researchers, elected officials, public policy advocates, and the public.

The fact sheets provide a statistical overview of the major health issues affecting Missouri girls and women. They contain information from a number of data sources on the frequency and trends of women's health problems during the past decade. The information focuses on the leading causes of death and disability, rates of preventive services (e.g., breast and cervical cancer screenings), and a review of behavioral risk factors (e.g., tobacco use, physical activity, nutrition) for Missouri women.

These fact sheets will be used by the Office on Women's Health to direct efforts to improving healthy outcomes for Missouri girls and women.

### Office on Women's Health

In 1999, the Office on Women's Health was established with the vision *“that all girls and women in the state of Missouri will live safe, healthy, productive lives and will develop to their full potential.”* The mission of the office, therefore, is to address the diverse health needs of all girls and women in Missouri by promoting a comprehensive, holistic view of health that spans the life cycle. In keeping with the overall goal of improving health and well-being of Missouri's girls and women, the desired long-term outcomes of the Office on Women's Health include:

- Girls and women making healthy choices for themselves and others
- More effective interventions for improving the health of girls and women
- Better coordinated, more collaborative programs and services for girls and women
- Health care providers better informed about the health needs of girls and women
- Health plans that are more responsive to the needs of girls and women
- Public policy that positively affects the lives of girls and women
- Research that promotes a better understanding of the many issues affecting women's health

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Additional copies of this report can be obtained by contacting: Missouri Department of Health and Senior Services, Office on Women's Health, P.O. Box 570, Jefferson City, MO 65102, Phone: (573) 526-0445. The fact sheets also will be available soon through the Missouri Department of Health and Senior Services web site at: [www.dhss.state.mo.us](http://www.dhss.state.mo.us).

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## Executive Summary

### Profile of Missouri Women

- In Missouri, women receive lower pay than men, and Hispanic women have the lowest median income among all women. Compared to the United States, women living in Missouri have a lower overall annual income.
- Many Missouri women are without health insurance coverage, with over 20 percent of non-white women uninsured.
- The number of white women who drop out of high school is declining.
- Women are more likely than men to complete a four- and six-year college education.
- Black women outnumber women of other races in Missouri prisons.

### Behavioral Risk Factors

- Less than 25 percent of all Missouri women consume the recommended number of servings of fruits and vegetables per day.
- 24 percent of Missouri women currently smoke cigarettes.
- Only 12 percent of Missouri women report engaging in regular or vigorous physical activity during the month.

### Overweight and Obesity

- Obesity among adults has doubled since 1980; 61 percent of adults in the United States are now overweight.
- In Missouri, 55 percent of non-white women are overweight and 38 percent of white women are overweight based on percent of median.

### Breast and Cervical Cancer

- Rates of breast cancer occurrence for Missouri women are slightly lower in whites, and slightly higher in African Americans when compared to United States rates.
- For cervical cancer, Missouri women overall have higher disease occurrence rates than the national average.
- Despite the known benefits of mammography screening, 21 percent of Missouri women over the age of 40 have never had a mammogram, and 33 percent of Missouri women over the age of 50 have not had a mammogram in the past two years.

## HIV and Sexually Transmitted Diseases

- Missouri women have lower rates of HIV/AIDS compared to Missouri men, but black women have disproportionately higher rates than their white counterparts.
- Compared to the national average, Missouri women have lower rates of HIV/AIDS but higher rates of certain other sexually transmitted diseases (Gonorrhea and Chlamydia).

## Leading Causes of Hospitalization

- The top six causes of hospitalization for women in Missouri are heart disease, mental health disorders, throat and lung disease, injury and poisoning, cancer, and digestive system-related conditions.
- In Missouri, heart disease is the leading cause of hospitalizations in women 45 years of age and older.
- Injury and poisoning rank among the six leading causes of hospitalization for women in all age groups.
- Mental health disorders is the number one cause of hospitalization among women ages 15-24 and 25-44, but ranks lower for women in older age groups.

## Leading Causes of Death

- The major health issues affecting women's mortality in Missouri are heart disease, cancer, suicide and injuries.
- Diseases of early infancy, injuries and homicides are the greatest contributors to mortality among girls and young women.
- Heart disease and cancer are the greatest contributors to death among women after age 44.
- Heart disease is the leading cause of death among women in Missouri and the United States.
- Even though the overall death rate from heart disease has significantly decreased, it has increased for Missouri women, particularly black women.

## Reproductive Health

- Missouri's rates of low birth weight, smoking during pregnancy and infant mortality are higher than in the United States.
- Negative reproductive outcomes, such as prolonged hospitalization, premature birth, low birth weight, and infant mortality are shown to be associated with factors such as lack of prenatal care, smoking during pregnancy, multiple pregnancies, repeated pregnancies and teenage pregnancy. The prevalence of some of these negative reproductive outcomes and risk factors is higher among black women than white and Hispanic women in Missouri.
- Teen pregnancies are more common among black women than white women in Missouri.

## Effects of Aging on Women's Health

- During the last century, the average life expectancy for women increased nationally by 30 years.
- Many Missourians report "more dependence" in activities of daily living and describe their overall mental well-being as "deteriorating" as they age.
- According to the National Women's Health Information Center, more than one in five women has arthritis, and it is 60 percent more common in women than men.
- In Missouri, the number of women age 65 and older who were told by their doctor that they have arthritis is almost two times the number for women in the 45-54 age group.

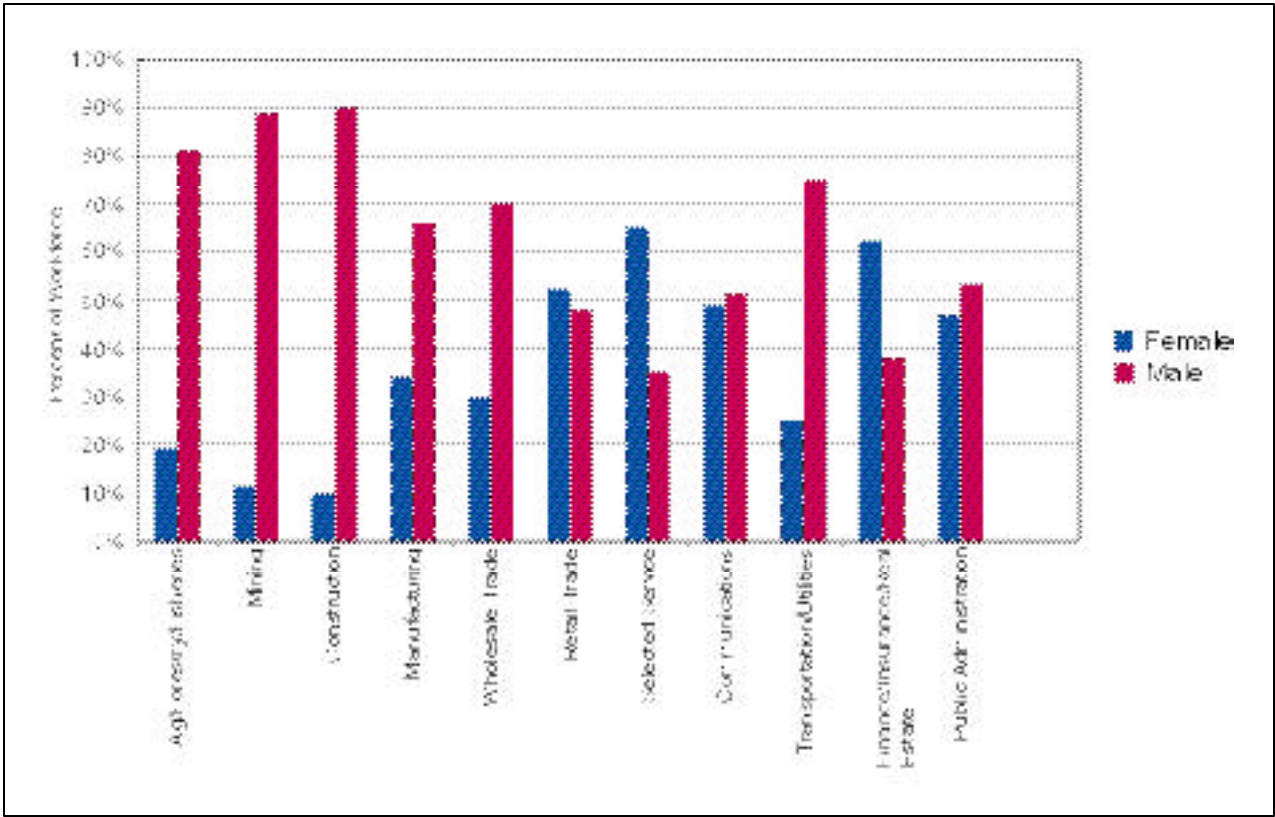


## Profile of Missouri Women

### Economic Status

Analysis of the Missouri labor force in terms of occupation shows that there are substantial differences in the percentage of women in comparison to men in certain fields. Women hold a distinct lead in selected service and finance/insurance/real estate fields (see Figure 1). Selected service is the services sector of the economy, including professional services (teachers, nurses), entertainment and recreation industry workers, private household workers, business and repair industry workers.

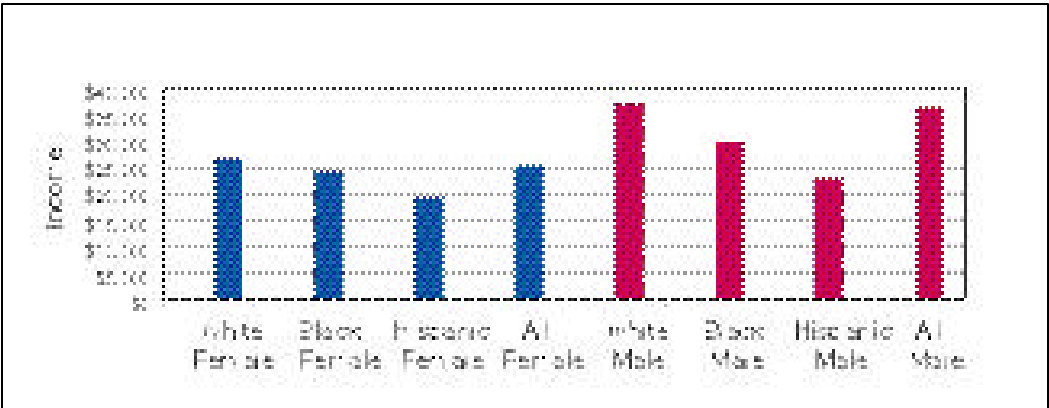
Figure 1. Distribution of Missouri Workforce by Gender, 1990



Source: USDC, Bureau of the Census

In Missouri, women receive lower pay than men, and Hispanic women have the lowest median income among all women (see Figure 2).

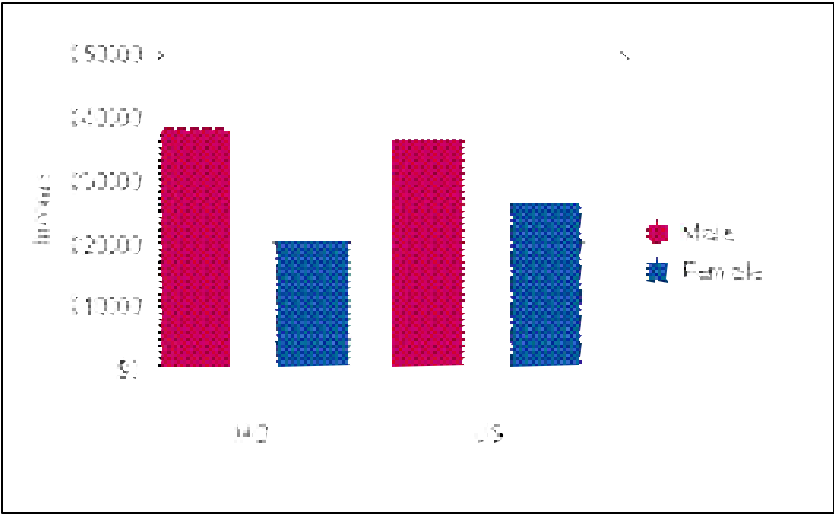
**Figure 2. Missouri Median Annual Earnings by Race and Gender, 1999**



Source: The National Committee on Pay Equity

In addition, compared to the United States, women living in Missouri have a lower overall annual income. In 1999, the average annual salary of Missouri women was 53 cents for every dollar earned by men (female \$20,000 vs male \$38,000). In 1999, the average salary of women in the United States was 76 cents for every dollar earned by men (female \$28,000 vs male \$37,000) (see Figure 3).

**Figure 3. Mean Income by Gender, Missouri vs United States, 1999**



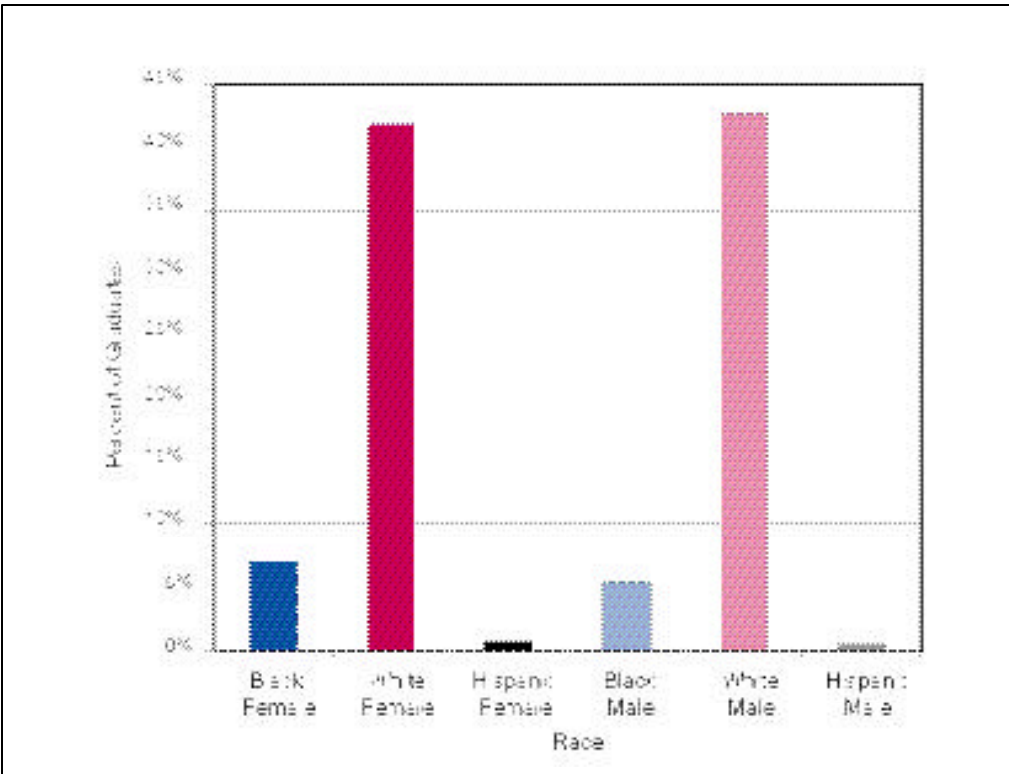
Source: The National Committee on Pay Equity

Educational Status

High School

High school graduation and dropout rates are important determinants of social economic status, and as such have been shown to be important predictors of risky behavior that leads to negative health outcomes. There is little racial-ethnic disparity in high-school graduation rates in Missouri, as demonstrated in the expected representation of blacks and a slight under-representation of Hispanics among graduates (see Figure 4). This proportional representation has remained stable between 1997 and 2001 (see Figure 5). However, in Missouri, young black men and women are over represented in the dropout rates for high school education. Blacks comprise nearly 25 percent of all dropouts in Missouri during 2001, while remaining small as a population (<13%) (see Figure 6). The only subgroup experiencing a decline in dropout rates is white women. Since 1997, dropout rates increased or remained the same for all other sub-groups (see Figure 7).

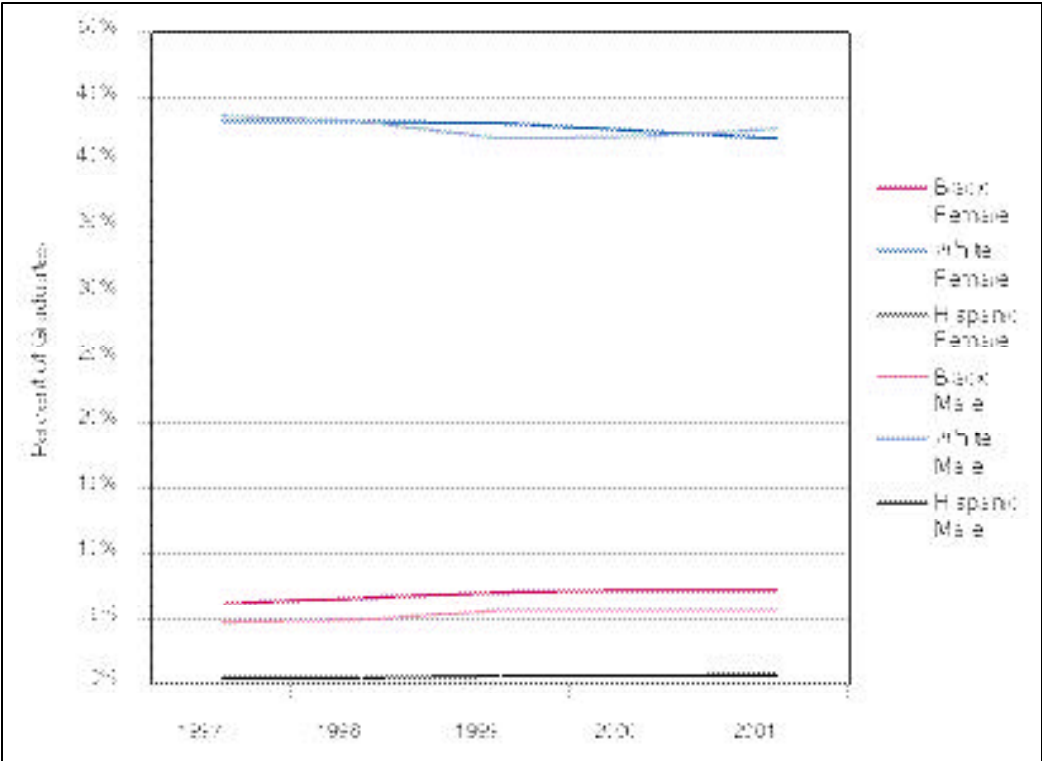
Figure 4. Percentage of High School Graduates by Race, Missouri, 2001



Source: Missouri Department of Elementary and Secondary Education

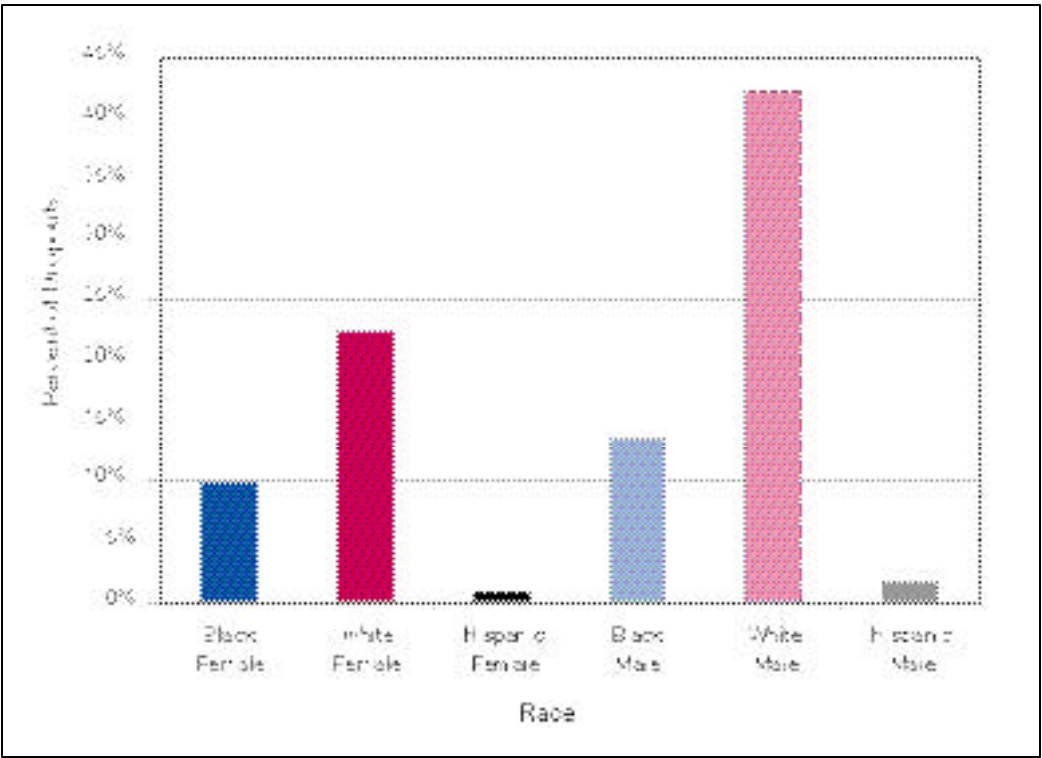


Figure 5. Percentage of High School Graduates by Race, Missouri, 1997-2001



Source: Missouri Department of Elementary and Secondary Education

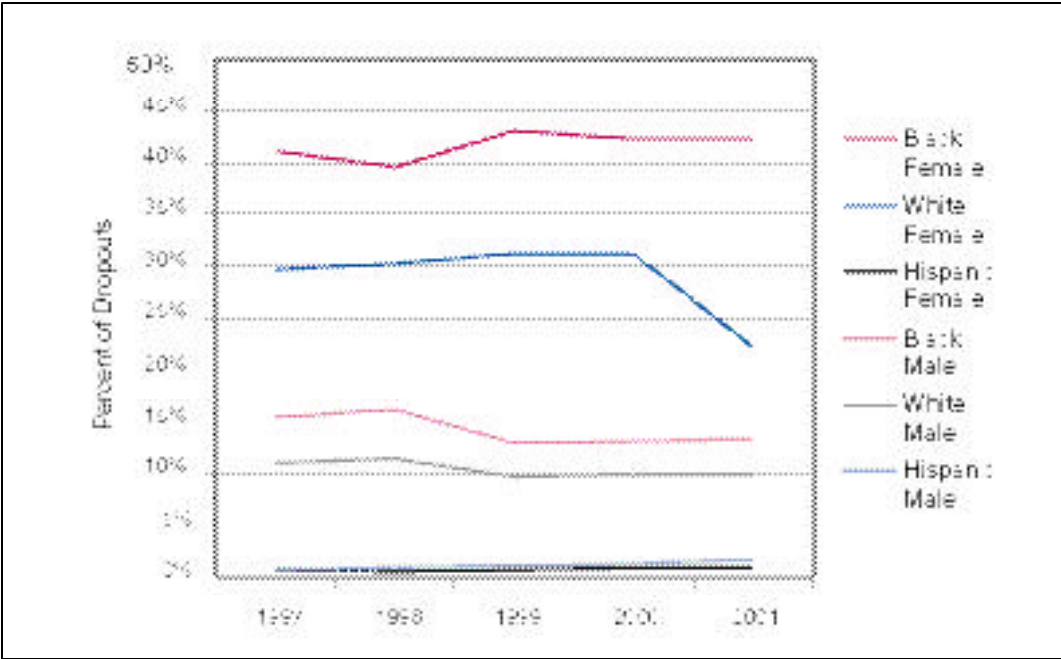
Figure 6. High School Dropouts by Race, Missouri, 2001



Source: Missouri Department of Elementary and Secondary Education



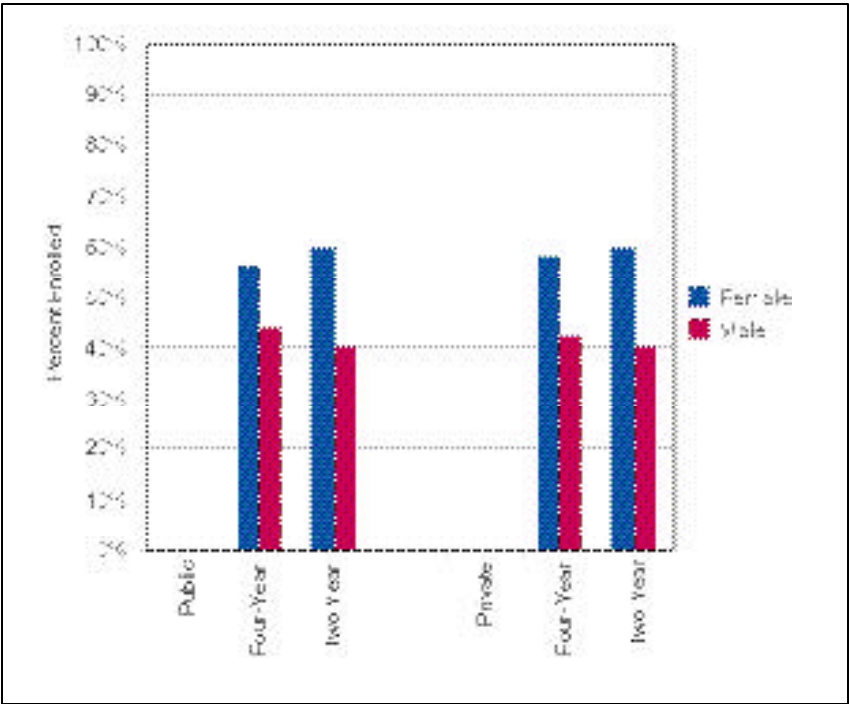
Figure 7. High School Dropouts by Race Missouri, 1997-2001



Source: Missouri Department of Elementary and Secondary Education

## Higher Education

Figure 8. Missouri Higher Education Enrollment by Gender, 1999

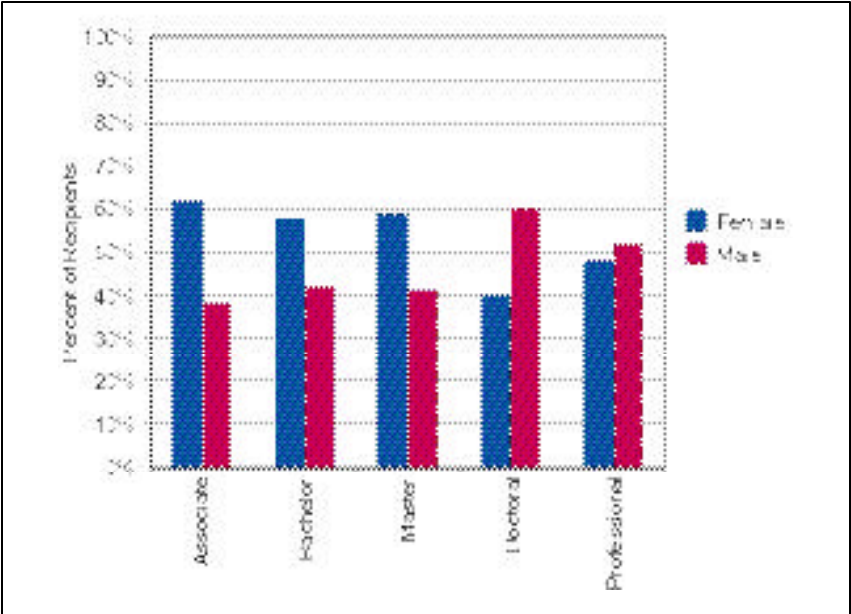


Source: IPEDS EF, Fall Enrollment

Income levels parallel educational attainment rates. Despite women being more likely than men to complete a four- and six-year college education, men are more likely to obtain a professional or doctorate degree than women (see Figure 8).

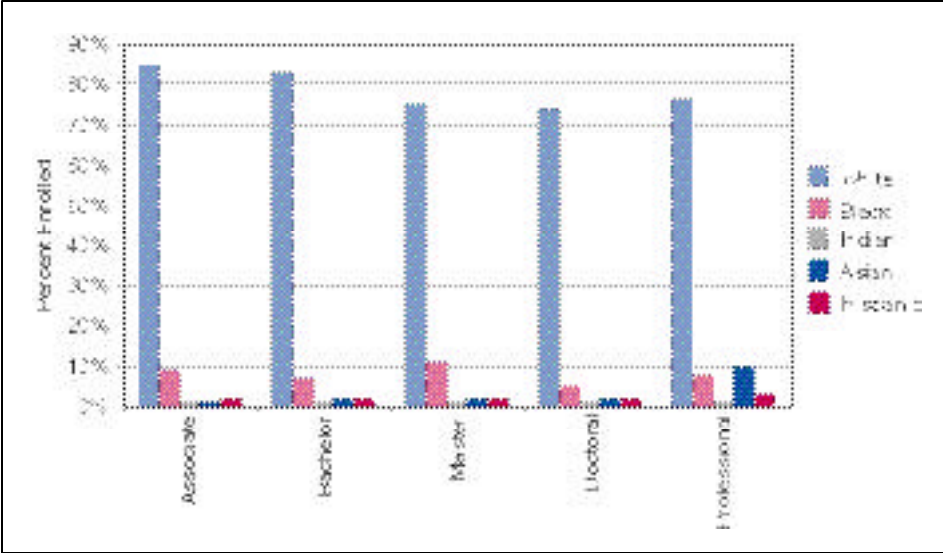
Women continue to increase their representation among degree recipients. In 1998-1999, women earned 62 percent of associate degrees awarded, 58 percent of bachelors degrees, 59 percent of masters degrees and 45 percent of doctoral and professional degrees (see Figures 9-10).

**Figure 9. Certificate and Degree Recipients From Public and Private Institutions by Gender, Missouri, 2000**



Source: IPEDS C, Completions

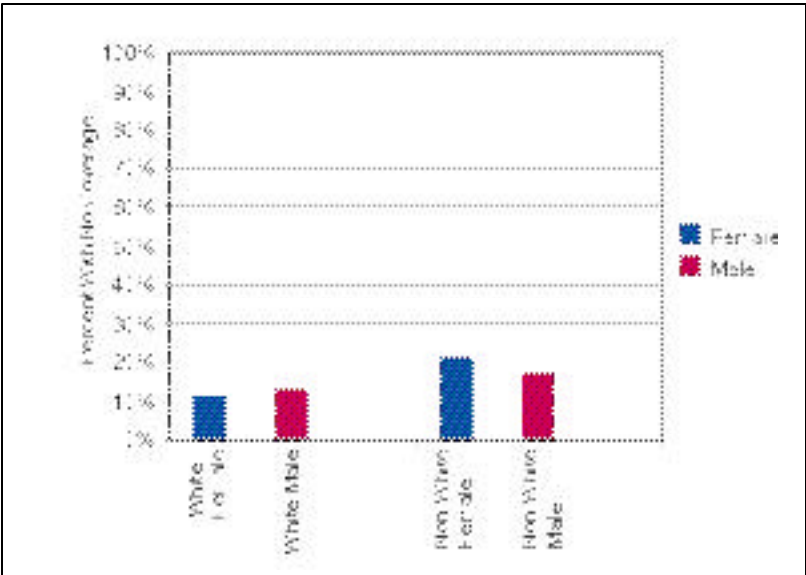
**Figure 10. Women Certificate and Degree Recipients by Race, Missouri, 2000**



Source: IPEDS C, Completions

## Health Insurance Coverage

**Figure 11. Estimate of No Health Insurance Coverage by Gender and Race, Missouri, 1998**



Source: Missouri Behavioral Risk Factor Surveillance System (BRFSS), Missouri Department of Health and Senior Services, 1998

Health insurance coverage confers important private and social health benefits. Lack of health insurance coverage is associated with important health outcomes. Uninsured adults generally encounter greater barriers to preventive services and treatment of diseases. They are more likely than insured adults to report poor health status, delay seeking medical care and forego necessary care for potentially serious symptoms. Missouri women, particularly minority women, suffer a disproportionate health burden compared to men partly due to under-insurance and lack of insurance. This fact combined with their lower median income may contribute to lower access and quality of health care for them and their children. Many Missouri women have no health insurance coverage, with over 20 percent of non-white women uninsured (see Figure 11).

## Women in Prison

Most Missouri women in prison are between 20 and 40 years of age (see Figure 12). Black women outnumber women of other races in Missouri prisons.

**Figure 12. Women in Missouri Prisons, 2001**

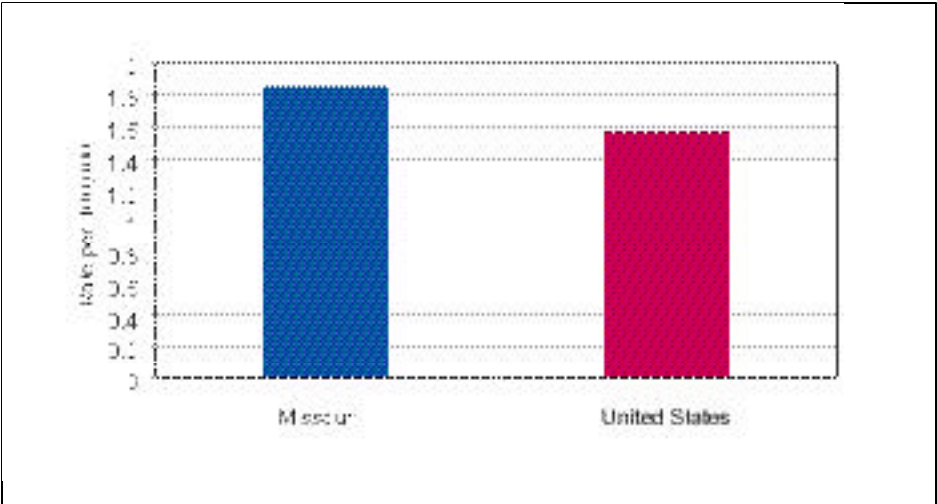


Source: Missouri Department of Corrections, 2001

**Violence Against Women**

Violence against women does not discriminate. It affects women of all racial, cultural and economic backgrounds, and has become a growing public health issue in every community. It is a leading cause of injury for American women between the ages of 15 and 54, but can happen at any age. In the category of violent crime, Missouri women have higher rates of death from homicide when compared to the rest of the nation (see Figure 13).

**Figure 13. Women Homicide Rates, Missouri vs United States, 1996**



Source: Centers for Disease Control and Prevention

**For More Information, contact:**  
**Missouri Department of Health and Senior Services**  
**Office on Women’s Health**  
**P.O. Box 570**  
**Jefferson City, MO 65102**  
Phone: 573-526-0445  
Internet: [www.dhss.state.mo.us](http://www.dhss.state.mo.us)



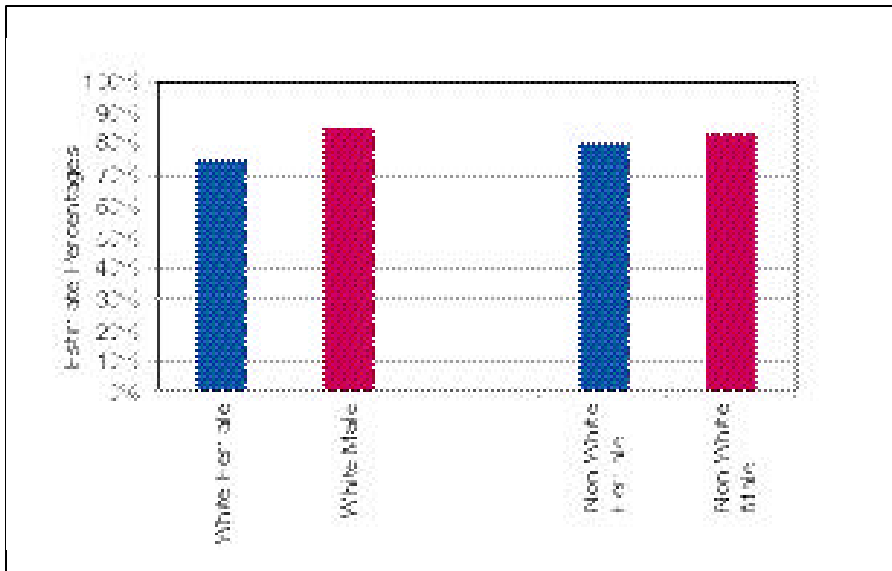
## Behavioral Risk Factors

Certain behaviors may place a person at risk for developing chronic diseases such as heart disease, obesity, cancer, and diabetes. Smoking, poor nutrition, and physical inactivity are three behaviors that have a profound impact on a person's health status.

In the United States, physical inactivity and unhealthy eating are responsible for at least 300,000 preventable deaths each year, second only to smoking, which is responsible for 430,000 deaths annually.

Less than 25 percent of all Missouri women consume the recommended number of servings of fruits and vegetables per day (see Figure 1), 24 percent are current smokers (see Figure 2), and only 12 percent report engaging in regular or vigorous physical activity during the month (see Figure 3).

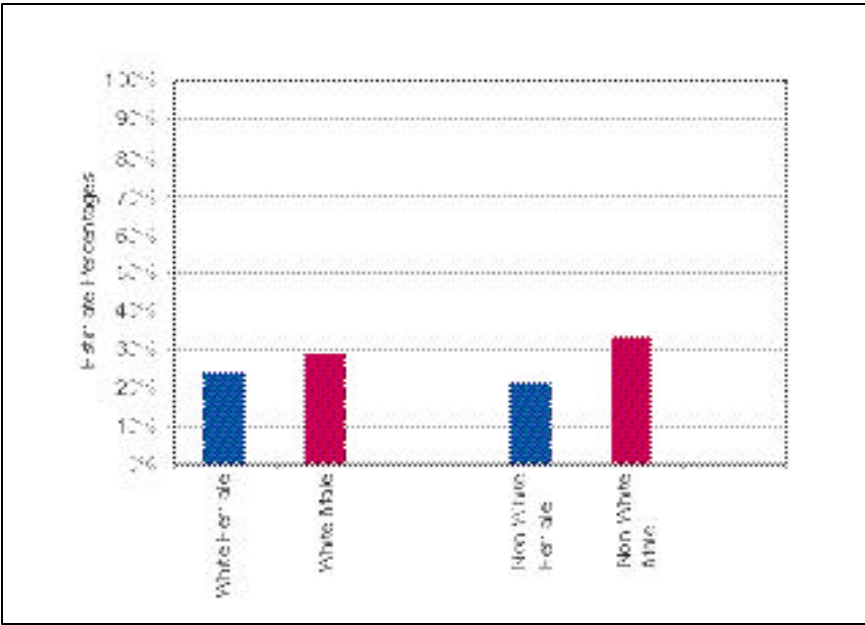
**Figure 1. Rates of Missouri Adults Who Do Not Consume 5 or More Fruits and Vegetables Daily, 1998**



*Source: Missouri Behavioral Risk Factor Surveillance System (BRFSS), Missouri Department of Health and Senior Services, 1998*

The U.S. Surgeon General reports that smoking among women has reached epidemic proportions. Twenty-two million of the smokers in this country are women, and there has been a rapid increase in the number of women’s deaths related to smoking. Lung cancer in women has increased 600 percent since 1950. In Missouri, the rate of lung cancer and chronic obstructive pulmonary disease has significantly increased for women, while stabilizing and declining among men.

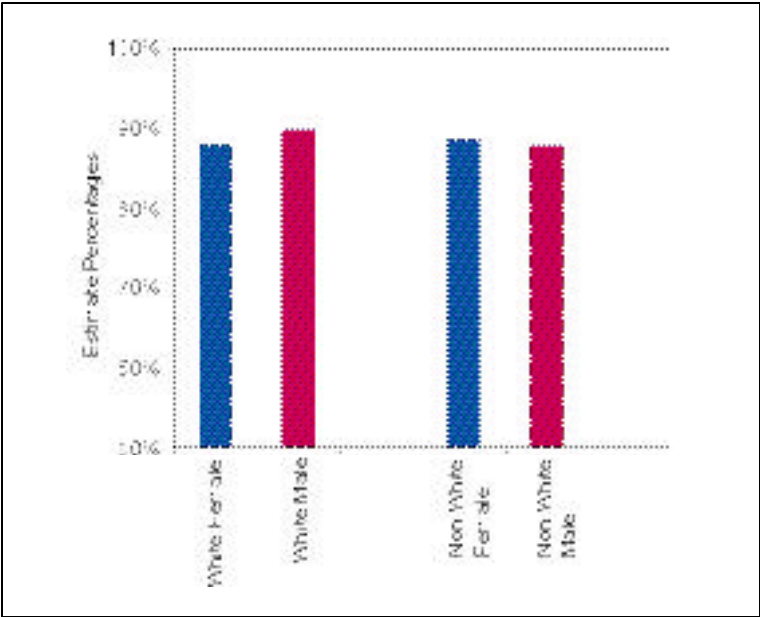
**Figure 2. Current Smoking Rates for Missourians, 1998**



Source: Missouri Behavioral Risk Factor Surveillance System (BRFSS), Missouri Department of Health and Senior Services, 1998

In the United States, nearly half of young people aged 12-21 years are not vigorously active on a regular basis. More than 60 percent of adults do not achieve the recommended amount of regular physical activity. In fact, 25 percent of all adults are not active at all. Inactivity with age is more common among women and persons with lower incomes and less education. According to the 1998 Missouri Behavioral Risk Factor Surveillance System, 88 percent of Missouri women surveyed reported no physical activity during the month (see Figure 3).

**Figure 3. Rates of Missourians Reporting No Physical Activity During the Month, 1998**



Source: Missouri Behavioral Risk Factor Surveillance System (BRFSS), Missouri Department of Health and Senior Services, 1998

### From a Public Health Perspective:

People who avoid the behaviors that increase their risk for chronic diseases can expect to live healthier and longer lives.

The United States Surgeon General reports that, “People who are usually inactive can improve their health and reduce their risk of developing or dying from heart disease, diabetes, high blood pressure, and colon cancer by becoming even moderately active on a regular basis.”

Physical activity need not be strenuous to achieve health benefits, and still greater health benefits can be achieved by increasing the amount of physical activity.

Much of the burden of disease in the United States and Missouri could be substantially reduced by prevention and reduction in smoking, increased level of physical activity, and increased intake of fruits and vegetables. These three risk factors alone contributed to over 70 percent of all deaths in Missouri in 1999.

### What Can You Do?

- Quit smoking.
- Get moving—30 minutes of physical activity each day can help control blood pressure, reduce cholesterol levels, and lose or maintain weight.
- Maintain a healthy weight.
- Eat a low-fat diet that contains at least five servings of fruits and vegetables each day.
- Take the stairs instead of the elevator.
- Find a walking partner.
- Play sports with your children.



**For More Information, contact:**

**Missouri Department of Health and Senior Services**  
**Division of Chronic Disease Prevention and Health Promotion**  
Phone: 573-522-2820  
Internet: [www.dhss.state.mo.us](http://www.dhss.state.mo.us)

**Missouri Department of Health and Senior Services**  
**Division of Nutritional Health and Services**  
Phone: 573-526-5520  
Internet: [www.dhss.state.mo.us/MissouriNutrition](http://www.dhss.state.mo.us/MissouriNutrition)  
(Links to other resources)

**American Cancer Society**  
Phone: 800-227-2345  
Internet: [www.cancer.org](http://www.cancer.org)

**American Diabetes Association**  
(for Missouri and NW Arkansas)  
Phone: 888-DIABETES  
Internet: [www.diabetes.org](http://www.diabetes.org)

**American Heart Association**  
(English and Spanish language available)  
Phone: 888-MY-HEART  
Internet: [www.women.americanheart.org](http://www.women.americanheart.org)

**American Lung Association**  
Phone: 800-586-4872

**National Center for Chronic Disease Prevention & Health Promotion**  
Phone: 770-488-5820  
Internet: [www.cdc.gov/nccdphp](http://www.cdc.gov/nccdphp)

**Partnership for Healthy Weight Management**  
[www.consumer.gov/weightloss](http://www.consumer.gov/weightloss)

**Weight Control Information Network**  
[www.niddk.nih.gov/health/nutrit/win.htm](http://www.niddk.nih.gov/health/nutrit/win.htm)

**Shape Up America**  
[www.shapeup.org](http://www.shapeup.org)

**Just Move**  
[www.justmove.org](http://www.justmove.org)



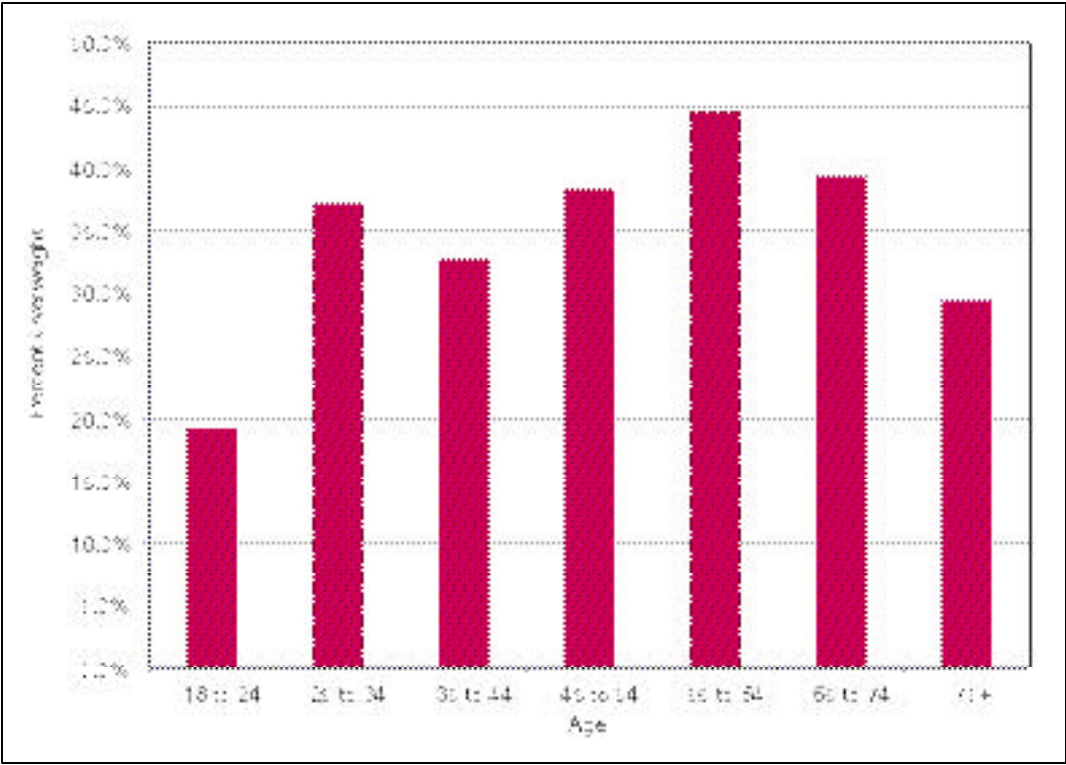
## Overweight and Obesity

Obesity is defined as an excessively high amount of body fat or adipose tissue in relation to lean body mass. Overweight refers to increased body weight in relation to height, when compared to a standard of acceptable or desirable weights.

Obesity among adults has doubled since 1980; 61 percent of adults in the United States are now overweight. People who are overweight have a higher risk of heart disease, high blood pressure, diabetes, arthritis and some cancers. Unhealthy eating and physical inactivity contribute to overweight and obesity. Together, they are responsible for at least 300,000 preventable deaths each year.

While overweight and obesity have increased for both men and women, disparities exist across all races, ethnic and age groups (see Figures 1 and 2).

**Figure 1. Percent of Overweight\* Women in Missouri by Age Group, 1998**

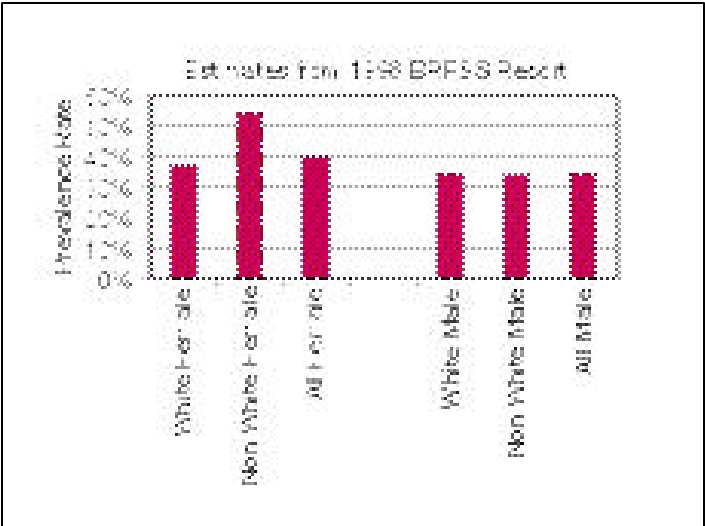


*\*The National Institutes of Health define obesity and overweight using a Body Mass Index (BMI), which is a calculation of a person's weight in kilograms divided by the square of their height in meters. An overweight adult is defined as one with a BMI between 25 and 29.9, while an obese adult has a BMI of 30 or higher.*

Source: Missouri Behavioral Risk Factor Surveillance System (BRFSS), Missouri Department of Health and Senior Services, 1998

In Missouri, 55 percent of non-white women are overweight and 38 percent of white women are overweight based on percent median\* (see Figure 2).

**Figure 2. Prevalence of Overweight Missourians Based on Percent Median by Gender and Race, 1998**



*\*Overweight by median means the person is at or above 120 percent of their ideal weight. Ideal weight is defined as the mid-value of a medium frame person from the 1959 Metropolitan Life Insurance Corporation height-weight tables.*

Source: Missouri Behavioral Risk Factor Surveillance System (BRFSS), Missouri Department of Health and Senior Services, 1998

**From a Public Health Perspective:**

Rising rates of overweight and obesity constitute a serious and complex public health issue. In order to reverse this trend, interventions and programs must be developed to promote healthy eating and physical activity by individuals and in families, schools, and communities.

**What Can You Do?**

- Achieve a healthy weight. Even modest weight loss can reduce your risk of serious health problems.
- Focus on healthy eating, not “dieting.” Make small changes in how you eat - changes that you can live with *long term*.
- Eat a variety of low-fat foods, including plenty of whole grains, fruits, and vegetables.
- Get physically active. Try to accumulate a total of 30 minutes of moderate physical activity each day.
- Be an advocate in your community for policy changes to promote healthy lifestyles. For example, join a coalition to build walking trails, or ask your favorite restaurant to add “Heart Healthy” entrees to their menu.

**For More Information, contact:**

**Missouri Department of Health and Senior Services**  
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Phone: 573-522-2820  
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(Links to other resources)

**American Dietetic Association**  
Phone: 800-877-1600  
Internet: [www.eatright.org](http://www.eatright.org)

**American Heart Association**  
Phone: 888-MY-HEART  
Internet: [www.women.americanheart.org](http://www.women.americanheart.org)

**Partnership for Healthy Weight Management**  
[www.consumer.gov/weightloss](http://www.consumer.gov/weightloss)

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**Just Move**  
[www.justmove.org](http://www.justmove.org)

**National Center for Chronic Disease Prevention & Health Promotion**  
Phone: 770-488-5820  
Internet: [www.cdc.gov/nccdphp](http://www.cdc.gov/nccdphp)

“Overweight and obesity may soon cause as much preventable disease and death as cigarette smoking. People tend to think of overweight and obesity as strictly a personal matter, but there is much that communities can and should do to address these problems.”

U.S. Surgeon General David Satcher, 12/13/2001



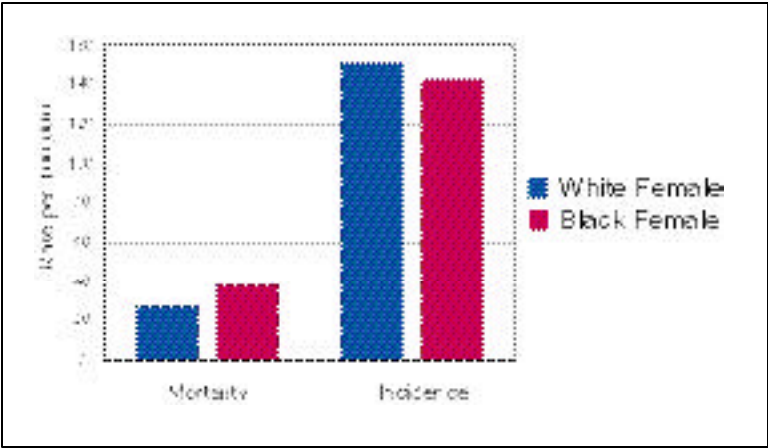
## Breast and Cervical Cancer

### Breast Cancer

Next to skin cancer, breast cancer is the most common cancer among American women. It is second only to lung cancer as the leading cause of cancer-related deaths. In the United States, a woman is diagnosed with breast cancer every three minutes. Most women who develop breast cancer have no special risk factors for the disease. Mammography is the best available method to detect breast cancer in its earliest, most treatable stage. Despite the known benefits of mammography screening, 21 percent of Missouri women over the age of 40 have never had a mammogram, and 33 percent of Missouri women over the age of 50 have not had a mammogram in the past two years.

Figure 1 shows the mortality and incidence rates for breast cancer in Missouri women. Breast cancer mortality in Missouri men is too small to calculate rates. Although the breast cancer incidence rate in white women is higher than their black counterparts, the mortality rate in white women due to breast cancer is lower than their black counterparts.

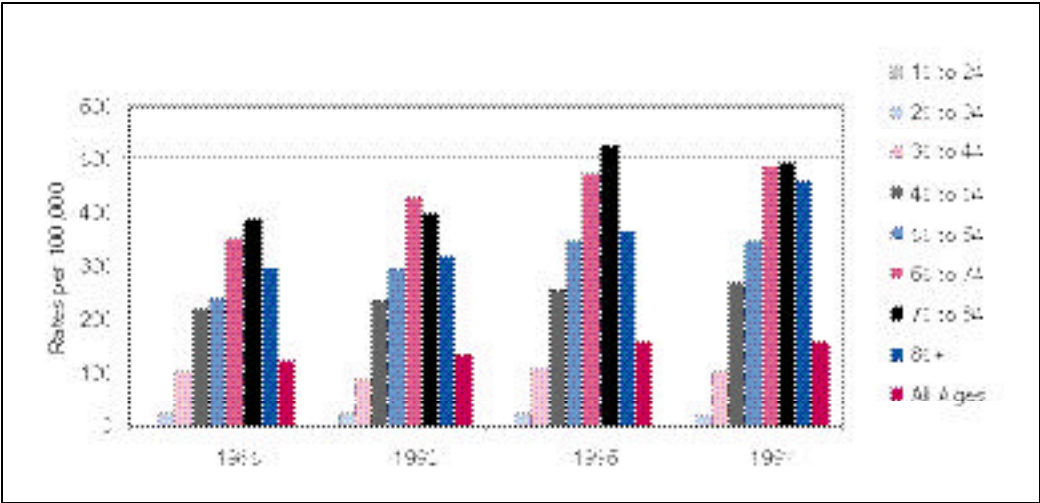
**Figure 1. Breast Cancer Mortality and Incidence Rates, Missouri, 1998**



Source: Missouri Information for Community Assessment (MICA),  
Missouri Department of Health and Senior Services

In Missouri, the incidence of breast cancer in women is highest among the 65-74 and 75-84 age groups (see Figure 2).

**Figure 2. Breast Cancer Incidence Rates in Missouri Women by Age Group and Year, 1985, 1992, 1996 and 1997**

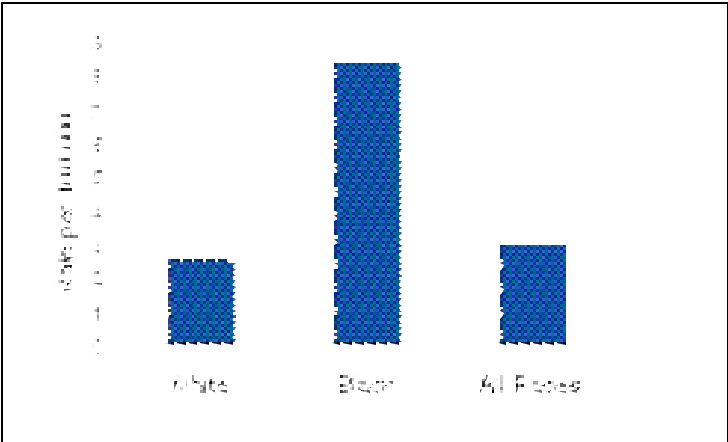


Source: Missouri Information for Community Assessment (MICA), Missouri Department of Health and Senior Services

### Cervical Cancer

Due to early detection efforts, the incidence of invasive cervical cancer has decreased significantly over the last 40 years. Cervical cancer screening using the Pap test detects not only cancer but also pre-cancerous lesions. Detecting and treating these lesions can actually prevent cervical cancer, ultimately decreasing the rate of death from this disease. In Missouri, cervical cancer in women is highest among black women (see Figure 3).

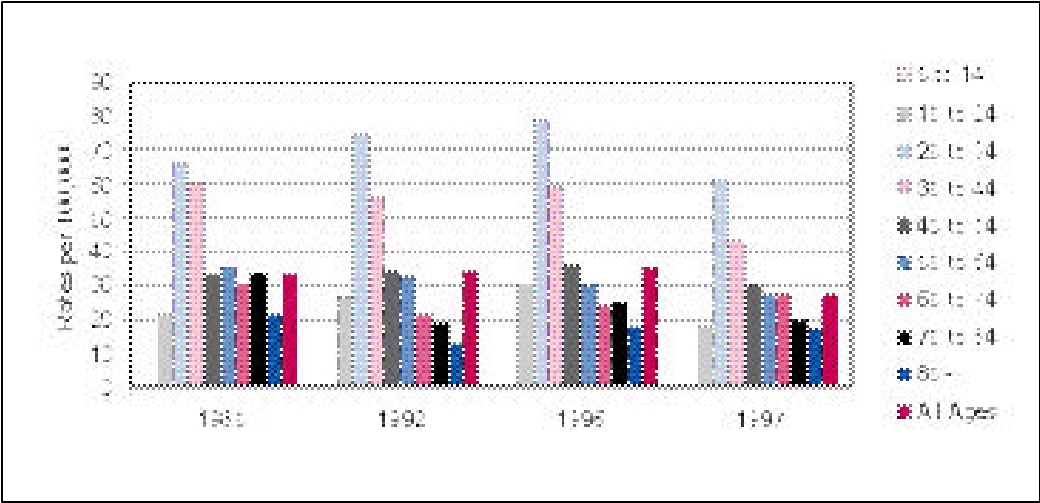
**Figure 3. Cervical Cancer Death Rates, Missouri, 1998**



Source: Missouri Information for Community Assessment (MICA), Missouri Department of Health and Senior Services

In Missouri, the incidence of cervical cancer in women is highest in the 25-34 and 35-44 age groups (see Figure 4).

**Figure 4. Cervical Cancer Incidence Rates in Missouri Women by Age Group and Year, 1985, 1992, 1996 and 1997**



Source: Missouri Information for Community Assessment (MICA), Missouri Department of Health and Senior Services

### From A Public Health Perspective:

Breast or cervical cancer deaths are highly preventable if the disease is detected at an early stage of development. Since 1993, the Missouri Department of Health and Senior Services, Bureau of Cancer Control, Breast and Cervical Cancer Screening Program has targeted low income women. These efforts coupled with dissemination of recommendations for cancer screening have increased screening coverage for minority women. Though breast and cervical cancer death rates have improved overall in Missouri, the current racial disparity in mortality indicates that this strategy will have to continue until the gap is bridged.

### What Can You Do?

Early breast cancer does not cause pain. However, when the cancer grows, it can cause changes that women should watch for.

#### Changes women should watch for:

- A lump or thickening in or near the breast or in the underarm area.
- A change in the size or shape of the breast.
- Nipple discharge or tenderness.
- Ridges or pitting of the breast.
- A change in the way the skin of the breast, areola (the dark area around the nipple), or the nipple looks or feels.



Increasing cancer-screening rates among all women can reduce the number of breast and cervical cancer deaths.

- Perform monthly breast self-exams.
- See your health care provider annually for a breast exam.
- Have a mammogram every one to two years after the age of 40.
- Get a Pap test every one to three years after the age of 18 or when sexually active.

**For More Information, contact:**

**Missouri Department of Health and Senior Services**  
**Missouri Breast and Cervical Cancer Control Program**

Phone: 573-522-2845

Internet: [www.dhss.state.mo.us](http://www.dhss.state.mo.us)

**American Cancer Society**

Phone: 800-227-2345

Internet: [www.cancer.org](http://www.cancer.org)

**National Center for Chronic Disease Prevention & Health Promotion**

Phone: 770-488-5820

Internet: [www.cdc.gov/nccdphp](http://www.cdc.gov/nccdphp)



## HIV/AIDS and Sexually Transmitted Diseases

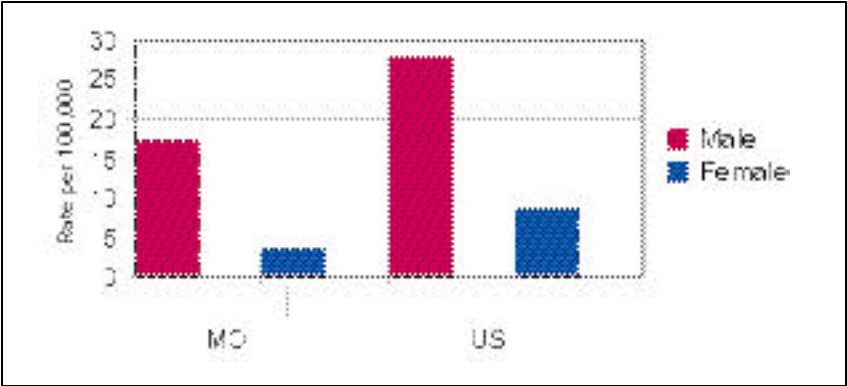
Sexually Transmitted Diseases (STDs) are widespread in the United States affecting one in four adults. Some of the most common bacterial STDs include gonorrhea, syphilis, trichomoniasis, and chlamydia. Bacterial STDs can be cured with antibiotics. Viral STDs, such as Human Immunodeficiency Virus (HIV), herpes, genital warts and cytomegalovirus, can be treated to help control the symptoms, but there is no cure for them.

STDs are the most commonly reported diseases in the United States. STDs can lead to serious health problems like infections, infertility, chronic pain, ectopic pregnancy, and cervical cancer. There are over 20 diseases that are transmitted through sexual contact. STDs affect women of every socioeconomic and educational level, age, race, and ethnicity.

HIV infection among women in the United States has increased alarmingly over the last decade, especially among black and Hispanic women. HIV destroys certain kinds of blood cells, which are crucial to the normal function of the human immune system. Although there have been considerable strides made in the development of drugs to help combat HIV, there still is no cure for acquired immunodeficiency disease (AIDS), caused by HIV at this time. All women who have sexual contact with an HIV-infected person or who use intravenous drugs are at high risk for AIDS.

AIDS rates in Missouri are slightly lower than in the United States for both men and women (see Figure 1).

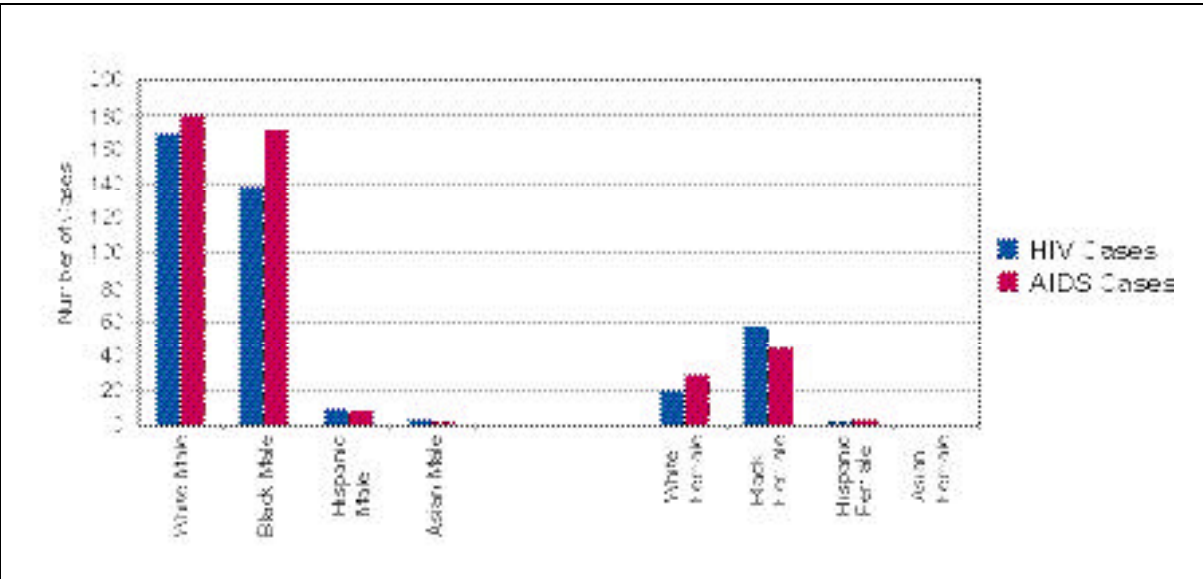
**Figure 1. Annual AIDS Rates by Gender, Missouri vs United States, 1999**



Source: Centers for Disease Control and Prevention

Although Missouri women have lower reported rates of HIV and AIDS compared to men, black women have disproportionately higher rates than their white counterparts. Figure 2 shows race and gender breakdown of reported HIV and AIDS in Missouri for 1999.

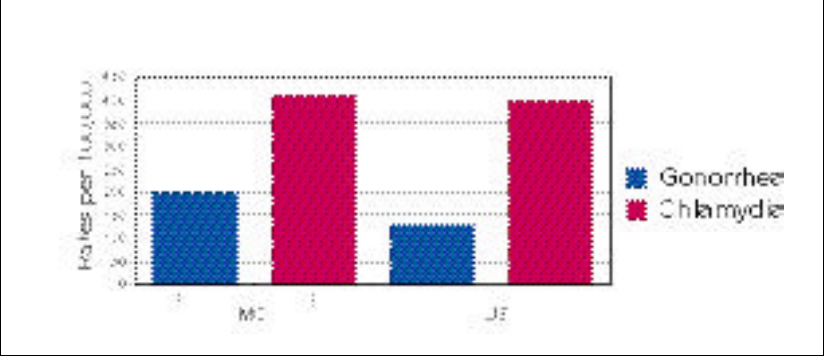
**Figure 2. Reported HIV and AIDS Cases by Race and Gender, Missouri, 1999**



Source: 1999 Epidemiological Profiles of HIV/AIDS and STDs in Missouri, Office of Surveillance, Missouri Department of Health and Senior Services

As of 1999, the 13 and younger age group accounted for 1 percent of the cumulative HIV reported cases and 0.6 percent of the cumulative AIDS cases. The 13-19 age group accounted for 4.6 percent of the cumulative HIV cases and 1 percent of the cumulative AIDS cases. The 20-29 age group accounted for 39 percent of the cumulative HIV cases and 23 percent of the cumulative AIDS cases. Compared to the national average, Missouri women have lower rates of HIV/AIDS but higher rates of certain other STDs (gonorrhea and chlamydia) (see Figure 3).

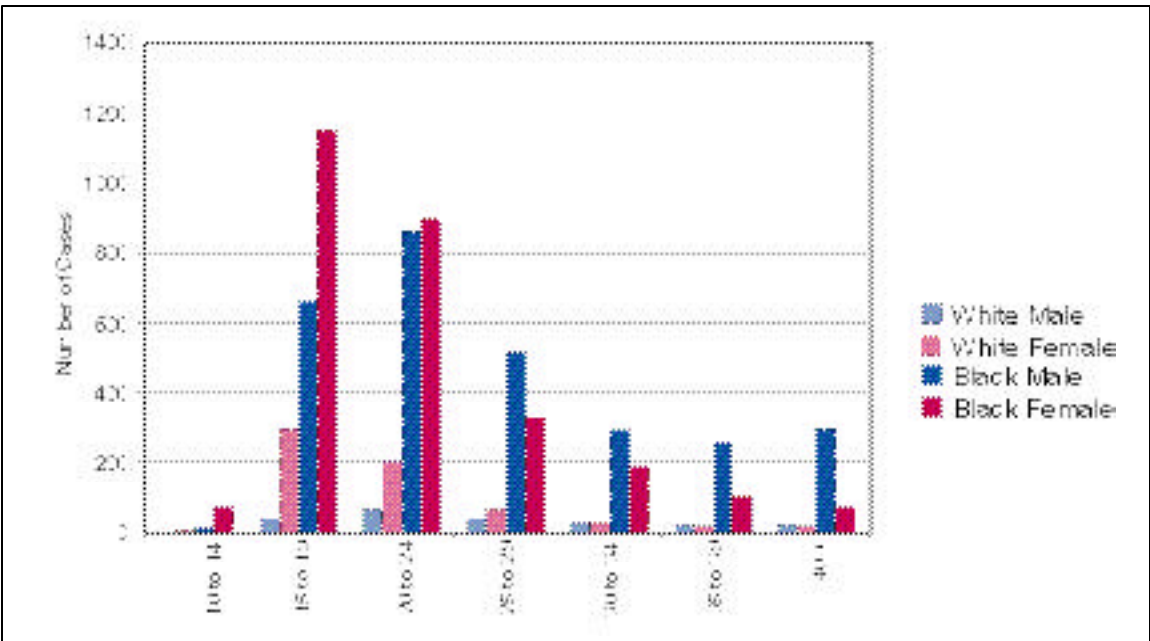
**Figure 3. STD Rates in Women by Disease, Missouri vs United States, 1999**



Source: Centers for Disease Control and Prevention

Figure 4 shows race and gender breakdown of reported gonorrhea cases in Missouri for 1999.

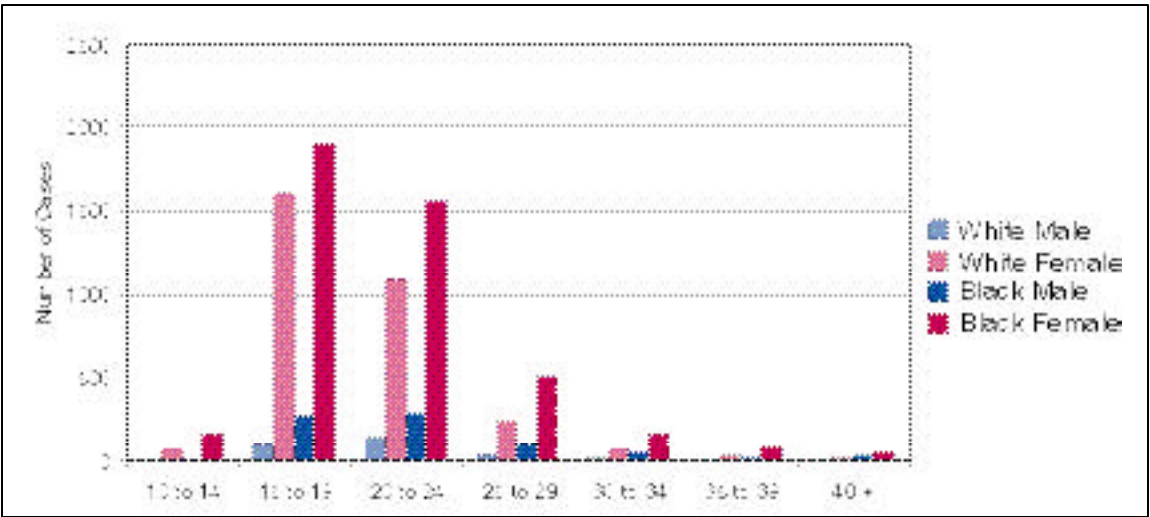
**Figure 4. Reported Gonorrhea Cases by Race, Gender and Age Group, Missouri, 1999**



Source: 1999 Epidemiological Profiles of HIV/AIDS and STDs in Missouri, Office of Surveillance, Missouri Department of Health and Senior Services

Of the total chlamydia cases reported in 1999, the vast majority was in women (86.2 percent). This reflects the selective screening of women for chlamydia undertaken by the Missouri Infertility Prevention Project. If similar widespread screening of males was also undertaken, it is expected that the number of diagnosed and reported cases in males would be much higher than is currently seen. Figure 5 shows race and gender breakdown of reported chlamydia cases in Missouri for 1999.

**Figure 5. Reported Chlamydia Cases by Race, Gender and Age Group, Missouri, 1999**



Source: 1999 Epidemiological Profiles of HIV/AIDS and STDs in Missouri, Office of Surveillance, Missouri Department of Health and Senior Services

### **From a Public Health Perspective:**

STDs affect women of every socioeconomic and educational level, age, race, and ethnicity. All STDs can be treated, and many can even be cured. Because women often do not show symptoms, if they are sexually active, regular screening is the only way to effectively prevent complications. The presence of sores and infection due to one STD increases the chance for acquiring another, like HIV, if one is exposed to it. Public health promotion of safe sex and regular screening have been shown to be effective strategies to reduce the burden of STDs among women.

### **What Can You Do?**

The only certain way to avoid getting STDs is to avoid sexual contact (abstinence), but your health care provider can advise you on how to lower your risk.

Prevention is the key for decreasing the rate of STDs. If you are sexually active:

- Practice safe sex.
- Insist that your partner use a condom.
- Talk to your sexual partner about STDs. Ask if he or she has had an STD or been exposed to one.
- Have regular checkups for STDs.

### **For More Information, contact:**

**Missouri Department of Health and Senior Services**

**Section of STD/HIV/AIDS**

Phone: 573-751-6439 Toll-free: 800-533-AIDS (2437)

Internet: [www.dhss.state.mo.us](http://www.dhss.state.mo.us)

**CDC National STD and AIDS Hotlines**

Phone: 800-227-8922 and 800-342-2437

Internet: [www.arthritis.org](http://www.arthritis.org)

**Centers for Disease Control and Prevention**

**Division of STD Prevention**

Internet: [www.cdc.gov/std/](http://www.cdc.gov/std/)

**CDC National Prevention Information Network**

Phone: 800-458-5231

Internet: [www.cdcnpin.org](http://www.cdcnpin.org)

**HIV/AIDS Treatment Information Service**

Phone: 800-448-0440

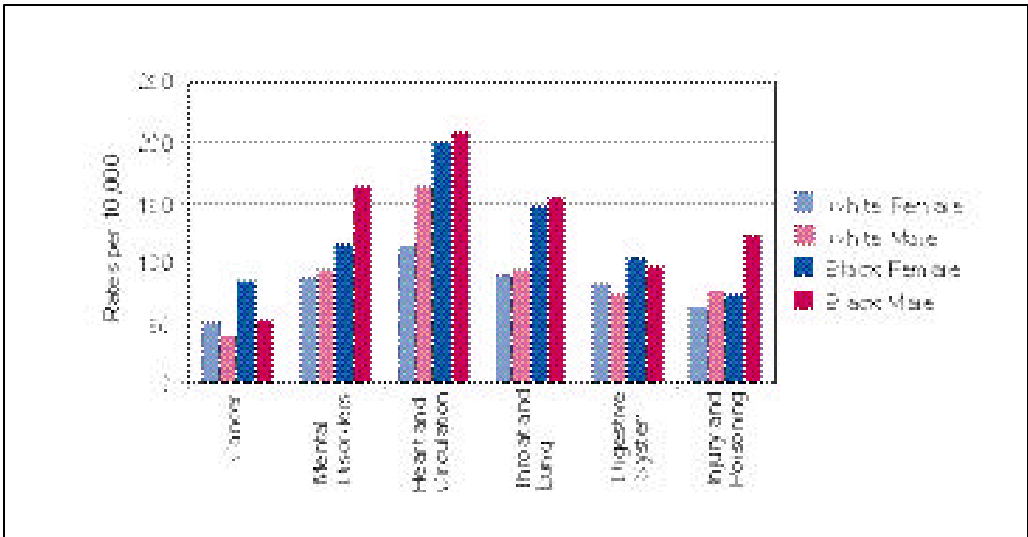
Internet: [www.hivatis.org](http://www.hivatis.org)



## Leading Causes of Hospitalization

Overall, black women have disproportionately higher rates of hospitalization than white women. The six leading causes of hospitalization for women in Missouri are heart disease, mental health disorders, throat and lung disease, injury and poisoning, cancer, and digestive system-related conditions (see Figure 1).

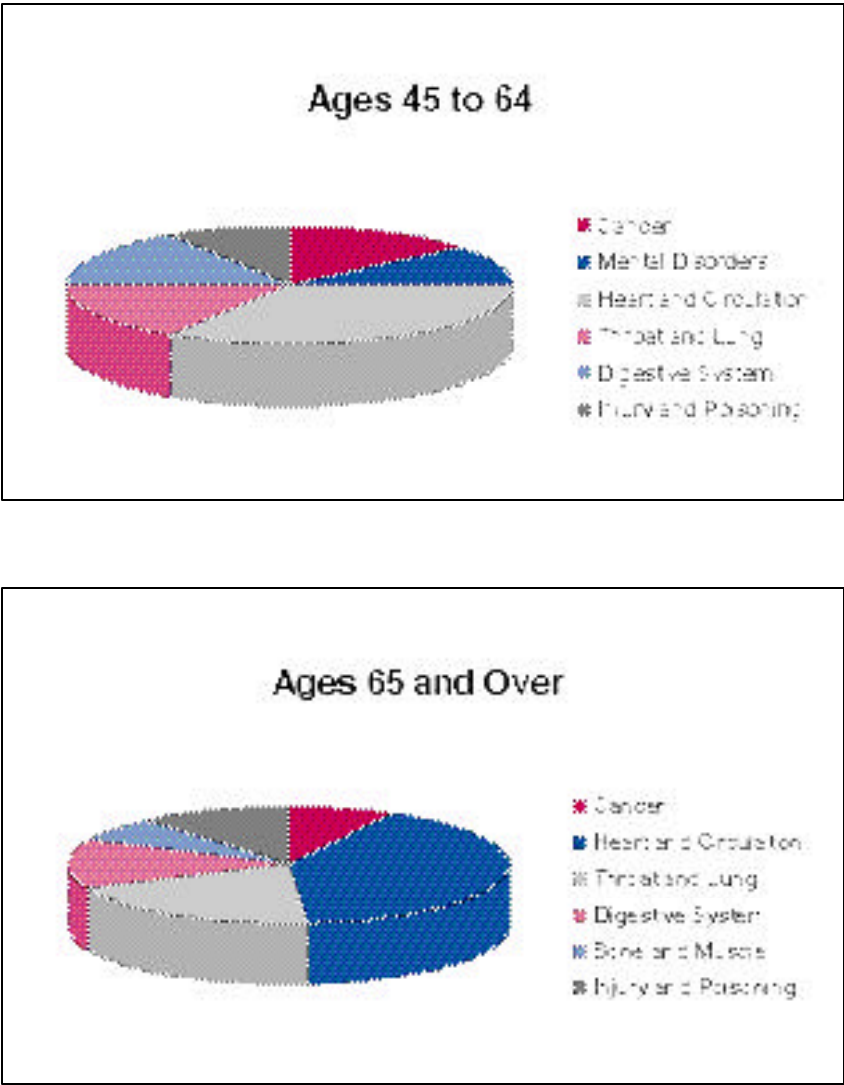
**Figure 1. Six Leading Causes of Hospitalization by Gender and Race, Missouri, 1999**



Source: Missouri Information for Community Assessment (MICA), Missouri Department of Health and Senior Services

Women often underestimate their risk for heart disease because it has long been viewed as a “man’s disease” not a women’s health issue. But in Missouri, heart disease is the leading cause of hospitalizations in women 45 years of age and older (see Figure 2).

**Figure 2. Leading Causes of Hospitalization in Missouri Women by Age Group, 1999**



Injury and poisoning rank among the six leading causes of hospitalization for all age groups. Mental health disorders are the number one cause of hospitalization among women ages 15-24 and 25-44 but rank lower for women in older age groups (data not shown).

Source: Missouri Information for Community Assessment (MICA), Missouri Department of Health and Senior Services

**From A Public Health Perspective:**

Injuries and mental health related disorders are a major cause of hospitalization in Missouri. Injuries such as automobile, sports, leisure and occupation-related accidents and fires are highly preventable events. Early recognition of mental health illness is key to a successful treatment and recovery. Public health programs and policy changes create incentives for people to adopt injury protection and preventive measures. Promoting early diagnosis and assuring the delivery of appropriate medical care to populations being treated for mental health disorders are important functions of public health.



## What Can You Do?

### *Intervention strategies to avoid unintentional fall injury*

- Monitoring of medications.
- Treatment of alcohol abuse.
- Development of exercise programs.
- Educational intervention for the elderly and children.

### *Intervention strategies for unintentional fire-burn injury*

- Smoke detectors are a reliable, inexpensive means of providing an early warning of fires.
- Sprinklers have a greater effect than detectors on preventing injuries.
- The National Committee for Injury Prevention and Control reported that cigarettes are estimated to cause 45 percent of all fires and 22 percent of deaths from house fires.

### *Intervention strategies for unintentional motor vehicle injury*

- The National Committee for Injury Prevention and Injury Control estimates motor vehicle fatalities can be reduced by 40-50 percent by the use of seat belts.
- Safety belts must be worn correctly to be effective and should be worn over the shoulder, across the chest, low on the lap, and must fit snugly.
- Correct installation and use of child safety restraint systems is imperative for safety.
- Participation in designated driver and safe-ride programs also is helpful.

## For More Information, contact:

**Missouri Department of Health and Senior Services**  
**Division of Maternal, Child and Family Health**  
**Office of Planning, Evaluation and Injury Prevention**  
Phone: (573) 751-8394  
Internet: [www.dhss.state.mo.us](http://www.dhss.state.mo.us)

**American Cancer Society**  
Phone: 800-227-2345  
Internet: [www.cancer.org](http://www.cancer.org)

**American Heart Association**  
Phone: 888-MY-HEART  
Internet: [www.women.americanheart.org](http://www.women.americanheart.org)

**American Lung Association**  
Phone: 800-586-4872

**American Association of Poison Control Centers**  
Phone: 800-222-1222  
Internet: [www.aapcc.org](http://www.aapcc.org)

**Missouri Department of Mental Health**  
Phone: 573-751-4122 or 800-364-9687 (outside the Jefferson City area)



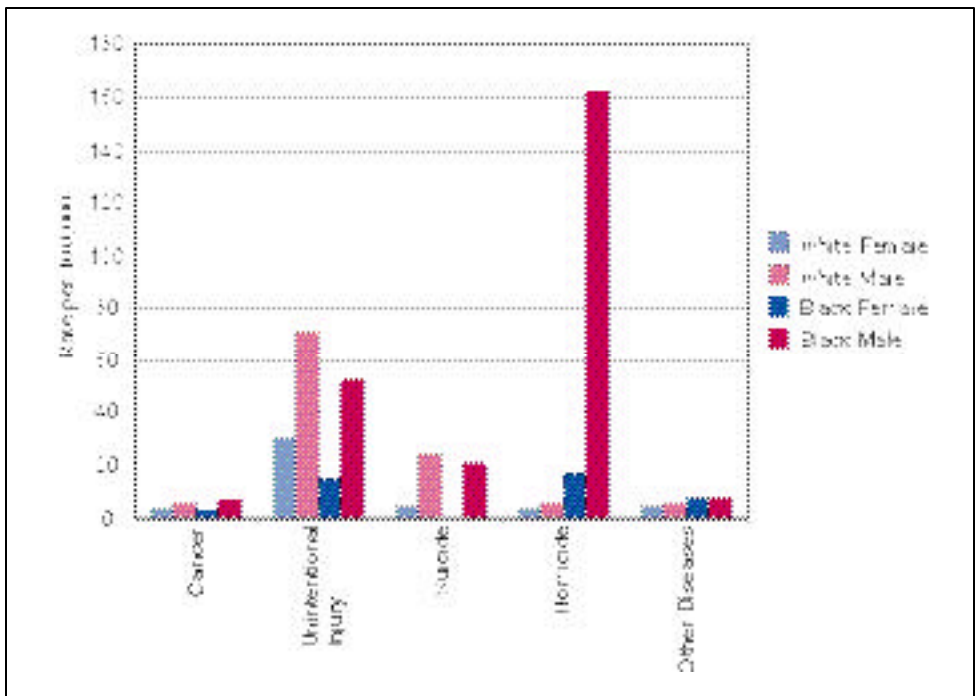
## Leading Causes of Death

### Leading Causes of Death

The fact that women live more than five years longer (average age 79.5) than men (average age 73.8) in the United States underscores that mortality is higher for men than women overall. However, more attention should be given to the age-death disparities between men and women and between black and white women.

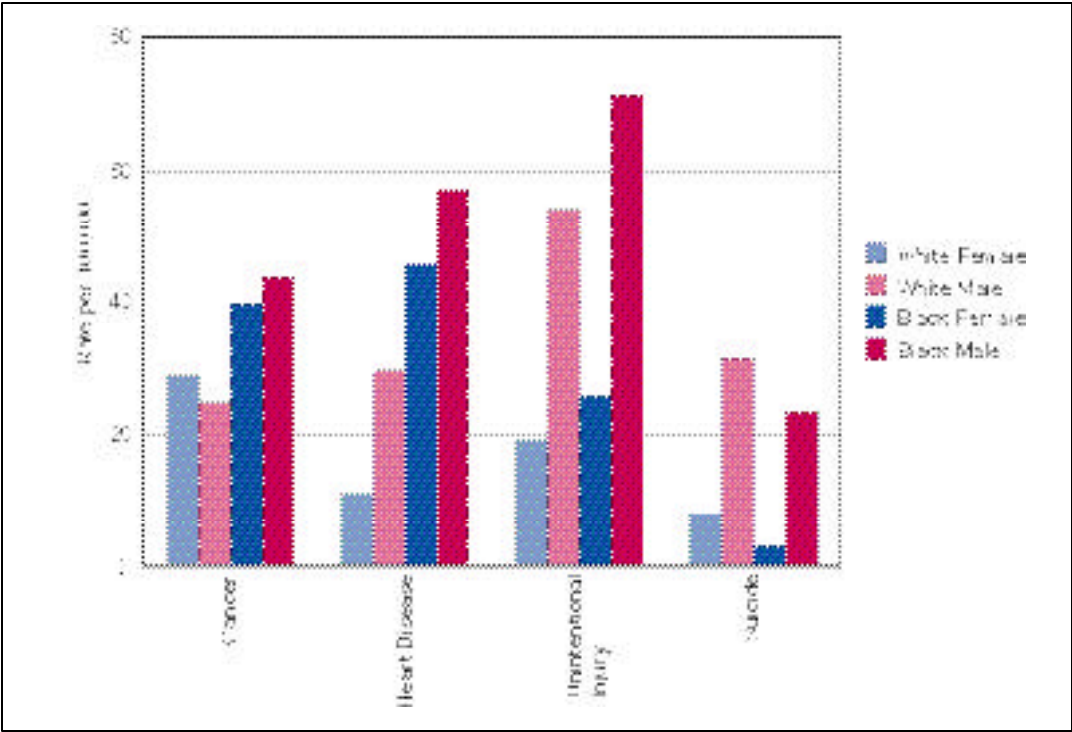
In Missouri, the overall mortality rate is lower for women than men for the six leading causes of death, and all other causes of death combined. However, black women's death rates for chronic conditions and their higher death rate for homicides are similar to those of white men. Overall, heart disease is the leading cause of death among Missouri women, followed by cancer. Through the spectrum of life, black women also suffer disproportionately relative to white women for: homicide in ages 15 to 24 (see Figure 1); cancer, heart disease and unintentional injury among ages 25-44 (see Figure 2); and cancer at ages 65 and over (see Figure 3). Black women also suffer disproportionately relative to white women for diseases of early infancy in ages under 15 and cancer and heart disease among ages 45-64 (data not shown).

**Figure 1. Leading Causes of Death in Age Group 15 - 24 by Gender and Race, Missouri, 1996-98**



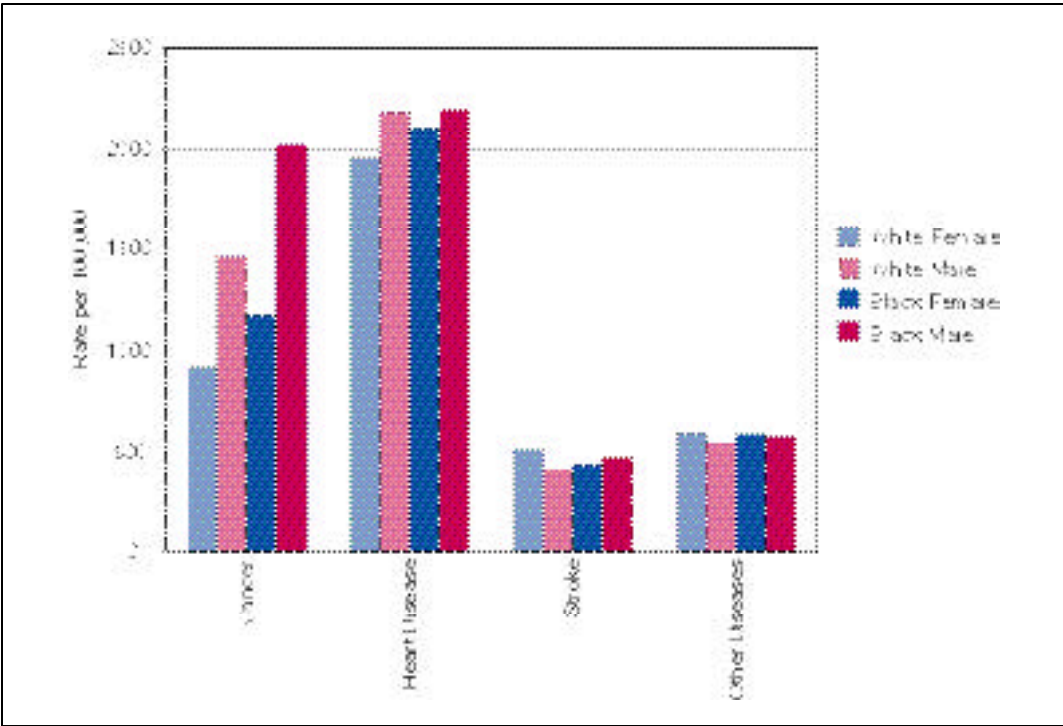
Source: Missouri Information for Community Assessment (MICA), Missouri Department of Health and Senior Services

Figure 2. Leading Causes of Death in Age Group 25 - 44 by Gender and Race, Missouri, 1996-98



Source: Missouri Information for Community Assessment (MICA), Missouri Department of Health and Senior Services

Figure 3. Leading Causes of Death in Age Group 65 and Over by Gender and Race, Missouri, 1996-98



Source: Missouri Information for Community Assessment (MICA), Missouri Department of Health and Senior Services

## Heart Disease Mortality

Heart disease is a disorder of the heart and blood vessel system. Coronary heart disease is a disease of the blood vessels of the heart, known as “coronary arteries.” Coronary heart disease causes chest pain and heart attacks. When too little blood flows to the heart, chest pain occurs, and when the blood flow is critically reduced, a heart attack occurs.

Even though the overall death rates of heart disease have dropped significantly, the rate at which Missouri women die of heart disease has actually increased. Black women in Missouri have higher heart disease rates than their white counterparts.

White women in Missouri and the United States have similar heart disease death rates, but Missouri’s black women have higher death rates from heart disease than black women in the United States.

Overall, heart disease is the leading cause of death in women over 65 years of age in Missouri (see Figure 3).

## From A Public Health Perspective:

The major health issues affecting women’s mortality in Missouri are heart disease, cancer, mental health disorders and injuries. Over the past ten years, women have adopted many of the risk behaviors that have shortened men’s life expectancies.

Modifiable risk factors for heart disease include smoking, high cholesterol levels, high blood pressure, overweight, and physical inactivity. In addition to not eating five or more fruits and vegetables a day, smoking, being overweight and physically inactive can also cause cancer and diabetes. Public health supports screening for these risk factors and promotes behavioral change to prevent these risks for early mortality.

## What Can You Do?

- Quit smoking.
- Get moving—30 minutes of physical activity each day can help you control blood pressure, reduce cholesterol levels, and lose or maintain a healthy weight.
- Get your blood pressure and cholesterol levels checked regularly.
- Maintain a healthy weight.
- Talk to your doctor about your heart disease risks and your family’s heart disease history.
- Eat at least five servings of fruits and vegetables each day.
- Consume alcohol in moderation (no more than one drink per day).
- Reduce stress levels.

**For More Information, contact:**

**Missouri Department of Health and Senior Services**  
**Division of Chronic Disease Prevention and Health Promotion**  
Phone: 573-522-2800  
Internet: [www.dhss.state.mo.us](http://www.dhss.state.mo.us)

**Missouri Department of Health and Senior Services**  
**Division of Nutritional Health and Services**  
Phone: 573-526-5520  
Internet: [www.dhss.mo.state.us/MissouriNutrition](http://www.dhss.mo.state.us/MissouriNutrition)  
(Links to other resources)

**American Heart Association**  
Phone: 888-MY-HEART  
Internet: [www.women.americanheart.org](http://www.women.americanheart.org)

**American Lung Association**  
Phone: 800-586-4872

**American Cancer Society**  
Phone: 800-227-2345  
Internet: [www.cancer.org](http://www.cancer.org)

**National Heart, Lung, and Blood Institute**  
Phone: 800-575-9355  
Internet: [www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)

**National Center for Chronic Disease Prevention & Health Promotion**  
Phone: 770-488-5820  
Internet: [www.cdc.gov/nccdphp/cvd](http://www.cdc.gov/nccdphp/cvd)

**National Hotline for Domestic Violence**  
Phone: 800-799-SAFE (TTY: 1-800-787-3224)

**Missouri Coalition Against Domestic Violence**  
Phone: 888-666-1911 (toll-free, statewide)



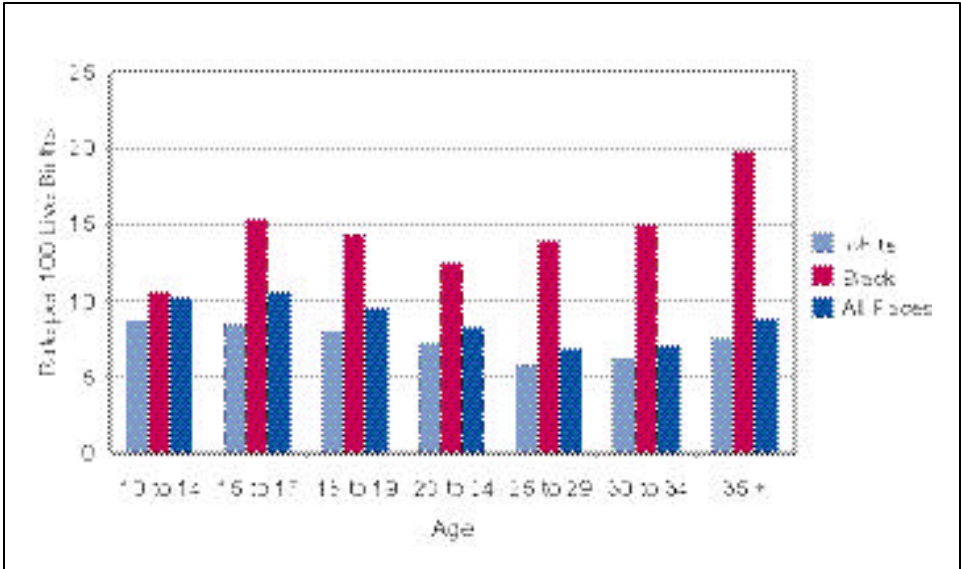
## Reproductive Health

### Pregnancy Outcomes

According to the Centers for Disease Control and Prevention, roughly six million American women become pregnant each year, and more than 10,000 deliver babies each day. In Missouri, approximately 75,000 babies are born each year. A safe and healthy pregnancy begins prior to conception with a healthy lifestyle including proper nutrition. Adequate prenatal care, including detection and treatment of complications, can help ensure the safe delivery of a healthy infant.

Missouri's rates of low birth weight, smoking during pregnancy and infant mortality are higher than in the United States. Negative reproductive outcomes, such as prolonged hospitalization, premature birth, low birth weight and infant mortality, are associated with factors such as lack of prenatal care, smoking during pregnancy, multiple pregnancies and teenage pregnancy. The prevalence of these negative reproductive outcomes and risk factors is higher among black women than white and Hispanic women in Missouri. In Missouri, black women have higher premature birth rates, higher low birth weight rates (see Figure 1), and an extremely higher rate for receiving no prenatal care (see Figure 2).

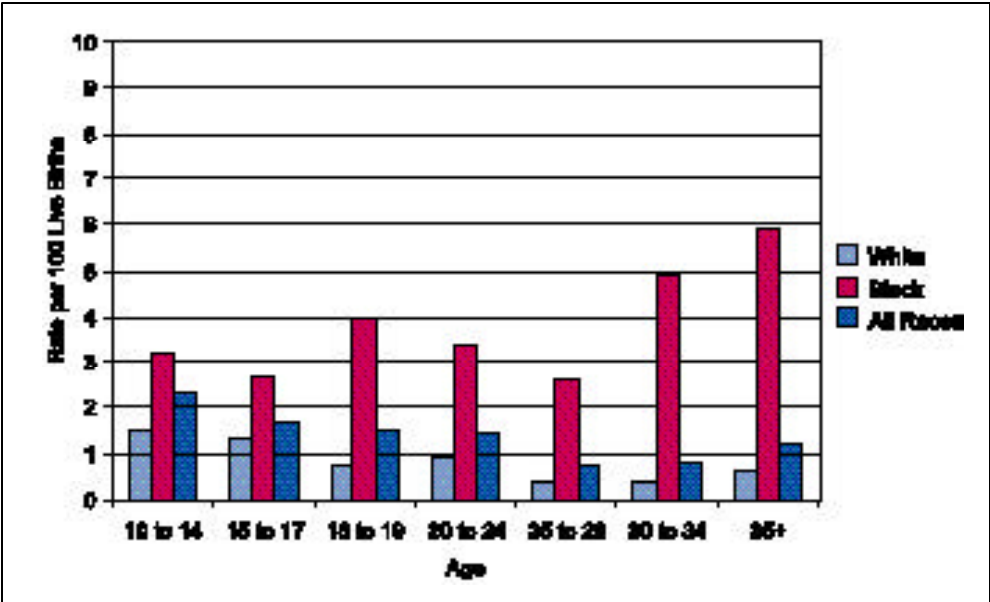
**Figure 1. Low Birth Weight Rate by Age Group and Race, Missouri, 1998**



Source: Missouri Information for Community Assessment (MICA), Missouri Department of Health and Senior Services



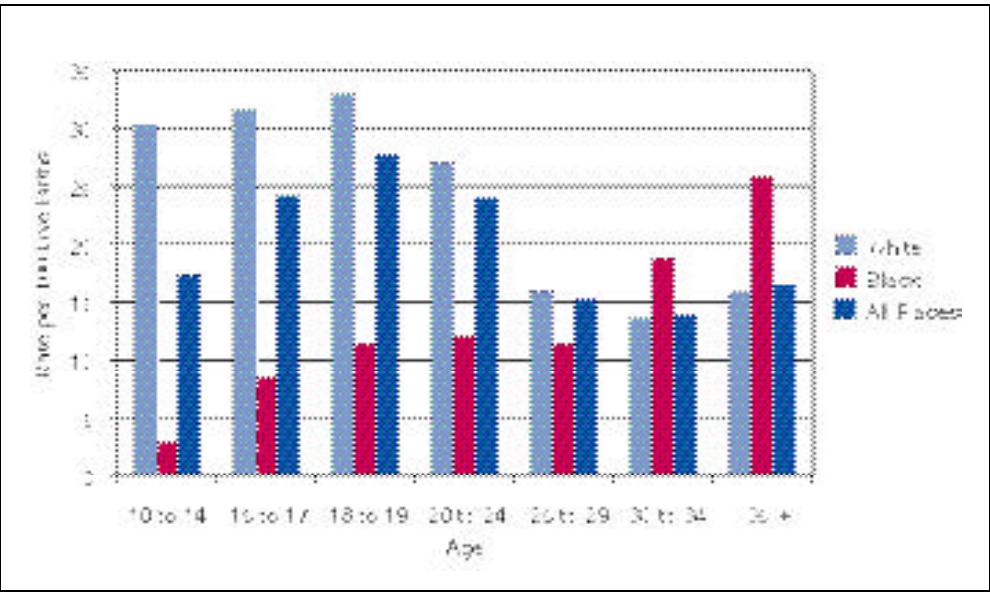
**Figure 2. Rate of Missouri Women Receiving No Prenatal Care by Age Group and Race, Missouri, 1998**



Source: Missouri Information for Community Assessment (MICA), Missouri Department of Health and Senior Services

In Missouri, white women have a higher than average rate of smoking during pregnancy (see Figure 3).

**Figure 3. Smoking During Pregnancy by Age Group and Race, Missouri, 1998**



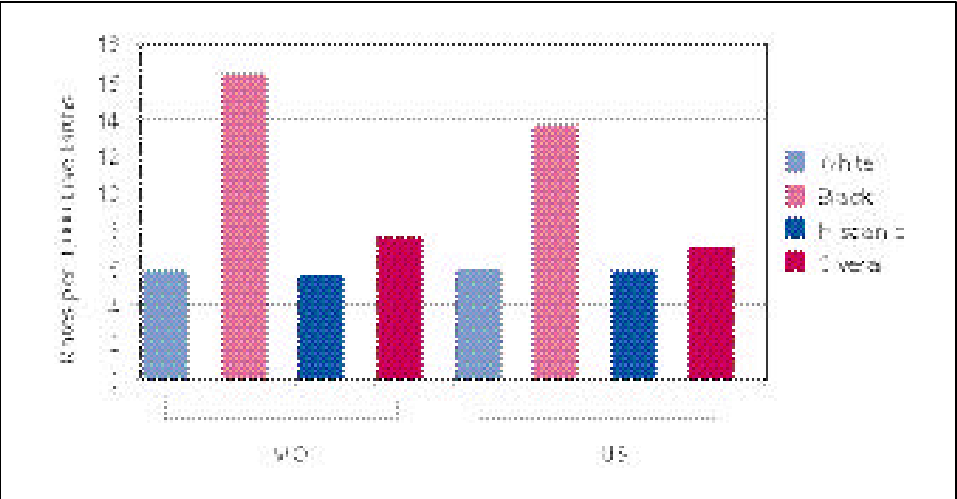
Source: Missouri Information for Community Assessment (MICA), Missouri Department of Health and Senior Services



Infant Mortality

Between 1987 and 1997, infant mortality decreased for both blacks and whites, but infant mortality is still higher for blacks than whites. The Missouri infant mortality rate among whites is comparable to the United States, while it is higher for blacks than in the United States (see Figure 4).

Figure 4. Infant Mortality Rates by Race, Missouri vs United States, 1998

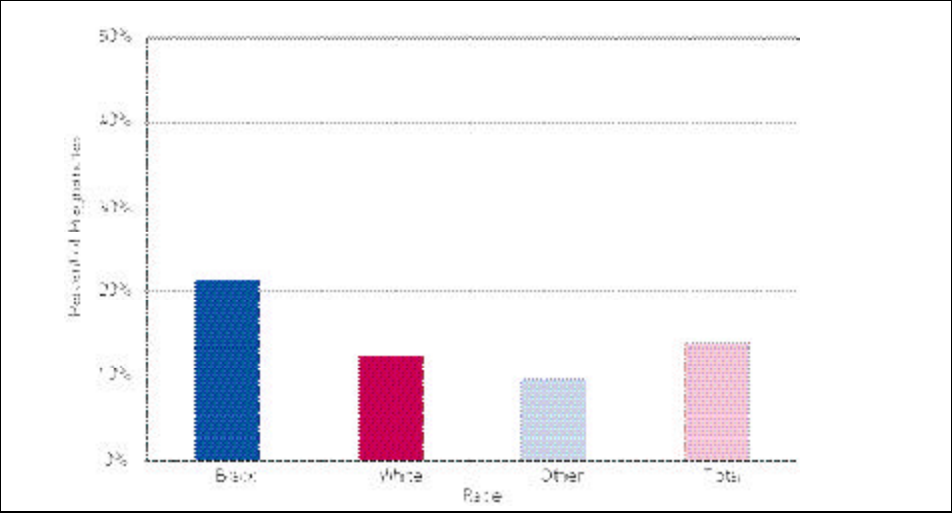


Source: Centers for Disease Control and Prevention

Teen Pregnancy

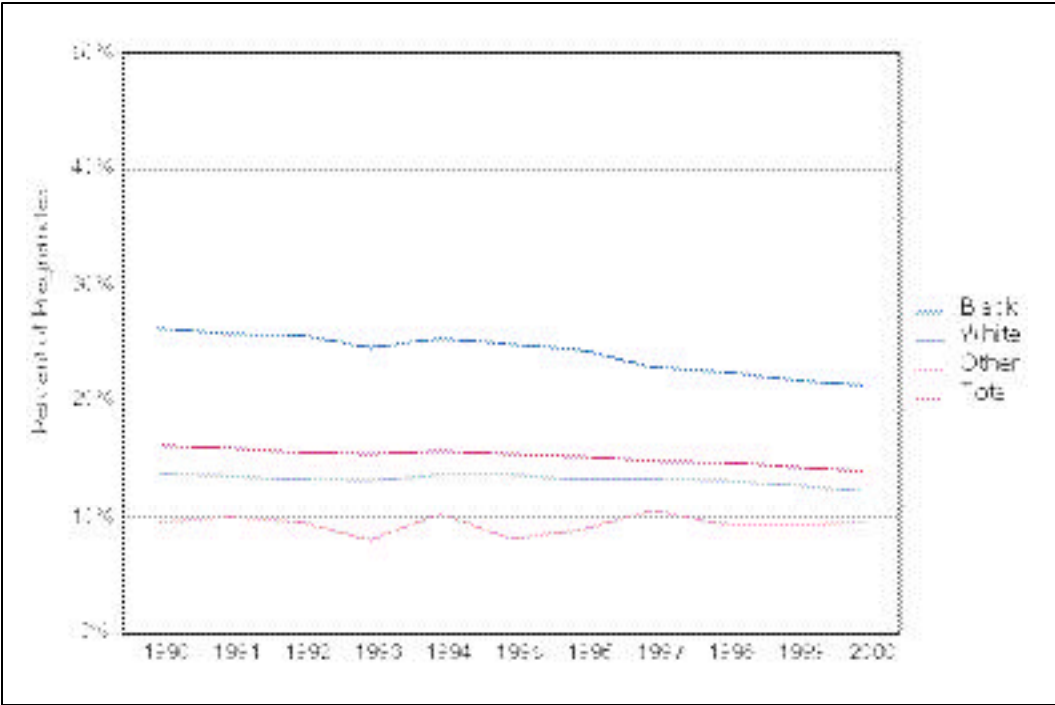
Teen pregnancies, lack of pre-natal care and smoking during pregnancy, three major risk factors for negative birth outcomes, have been more pronounced among black women between 1990 and 2000. Much progress has been achieved in Missouri in reducing racial disparity for smoking during pregnancy and lack of pre-natal care (data not shown in figures). The disparity in teen pregnancy, however, remains high despite improvement for all racial-ethnic groups. (see Figure 5). For the years 1990 and 2000, black women represented 27 percent and 22 percent of all teen pregnancies, respectively, compared to whites with 14 percent and 12 percent, for the same years (see Figure 6).

Figure 5. Percentage of Teen Pregnancy by Race, Missouri, 2000



Source: Missouri Information for Community Assessment (MICA), Missouri Department of Health and Senior Services

**Figure 6. Percentage of Teen Pregnancy by Race, Missouri, 1990-2000**



Source: Missouri Information for Community Assessment (MICA), Missouri Department of Health and Senior Services

### From A Public Health Perspective:

Although infant mortality decreased significantly over the past ten years in Missouri, it is still high compared to the United States. Identifying the factors that underlie infant mortality is an essential step in reducing this burden. Missouri is implementing many scientifically based interventions to reduce infant mortality. Studying the effectiveness of these interventions is crucial to adapting them more precisely to the needs of specific population groups.

### What Can You Do?

- Talk to your health care provider if you are thinking about becoming pregnant.
- If you are pregnant:
  - ✓ Get early and regular prenatal care. It is one of the best things you can do for your health and the health of your baby.
  - ✓ Do not smoke, drink alcohol or use drugs.
  - ✓ Eat a healthy diet that includes lots of fruits, vegetables, whole grains, and calcium-rich foods.
  - ✓ Get plenty of rest.
  - ✓ Be physically active unless your doctor advises against it.
  - ✓ Stay away from chemicals and toxins such as insecticides, solvents, and lead.
  - ✓ Avoid hot tubs, saunas, and x-rays.
  - ✓ Consume at least .4 mg of folic acid every day to reduce birth defects.
  - ✓ Limit or eliminate your caffeine intake from coffee, tea, soda, medications, and chocolate.
  - ✓ Get informed: read books, watch videos, go to a child birthing class, and talk to experienced mothers.

**For More Information, contact:**

**Missouri Department of Health and Senior Services  
Division of Maternal, Child and Family Health  
Bureau of Family Health**

Phone: 573-751-6215

Internet: [www.dhss.state.mo.us](http://www.dhss.state.mo.us)

**800-TEL-LINK** (800-835-5465)

Toll-free telephone line for information about pregnancy and many other, related issues, as well as assistance in linking with services.

**Missouri Department of Health and Senior Services  
Division of Nutritional Health and Services**

Phone: 573-526-5520

Internet: [www.dhss.mo.state.us/MissouriNutrition](http://www.dhss.mo.state.us/MissouriNutrition)

(Links to other resources)

Information about WIC (Women, Infants, and Children Supplemental Food):

Phone: 800-TEL-LINK

Or 800-392-8209 (Information about WIC and farmers' market food programs)

Information about breastfeeding:

Phone: 888-435-1464

**American College of Obstetricians and Gynecologists**

Phone: 202-638-5577

Internet: [www.acog.org](http://www.acog.org)

**The National Women's Health Information Center**

Phone: 800-994-9662 Hearing Impaired: 888-220-5446

Internet: [www.4women.gov](http://www.4women.gov)



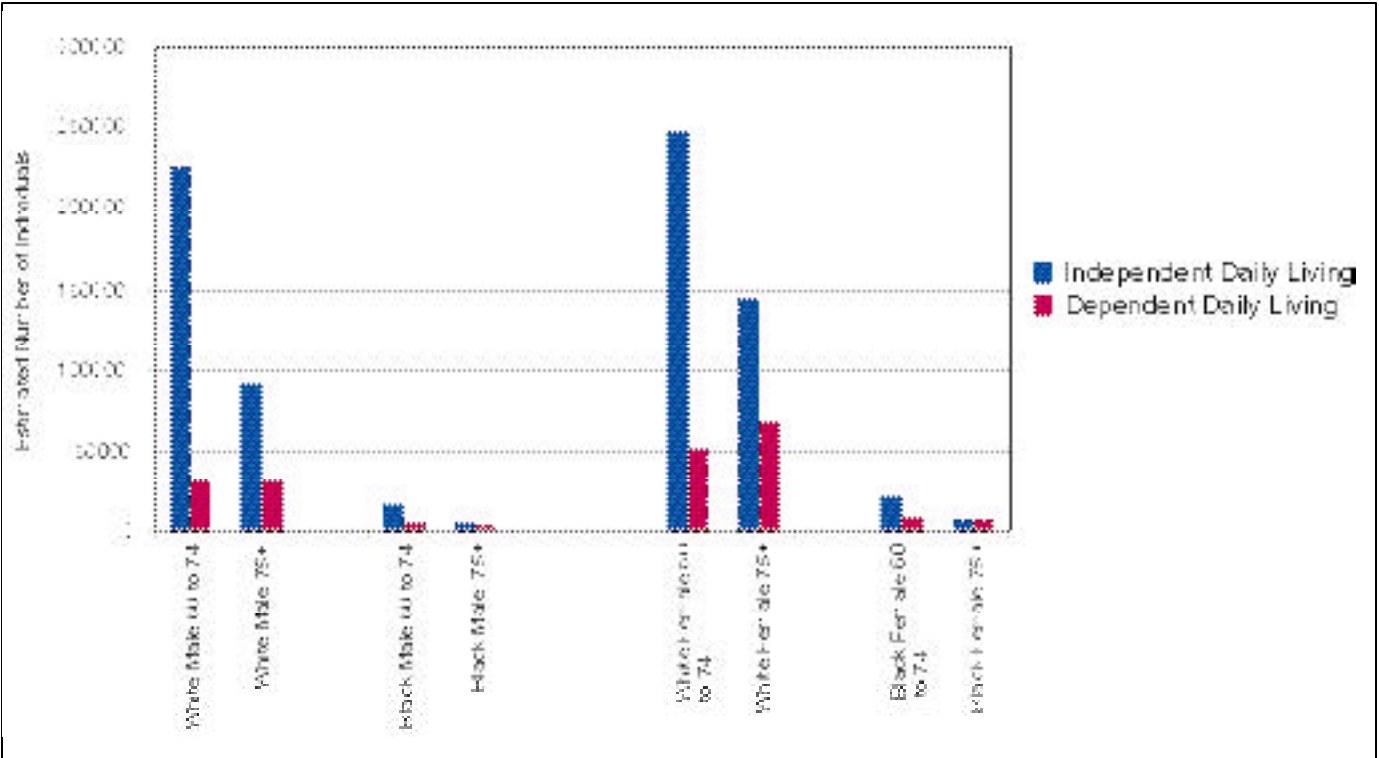
## Effects of Aging on Women's Health

Between 2000 and 2025, the population of Missouri is expected to grow 10.5 percent reaching 6,182,539 residents. The population will become older and specifically there will be more women than men in the 55 and older age groups. This demographic change has significant social, economic, and health implications for Missourians. As women age, they are more likely than men to be unpaid caregivers for chronically ill spouses or parents. Generally, caregiving takes a toll on the financial well-being, the social support network, and the mental and physical health of the caregiver. Many older women go into advanced age impoverished from having spent family assets on others' care and with only a portion of their spouses' Social Security as income. They also may be socially isolated as a result of having had little personal social time, often for years, and as a result of losing friends to death or infirmity. Many women enter old age with their own health neglected.

### Independence of Daily Living

During the last century, the average life expectancy for women increased nationally by 30 years. One of our nation's health goals is to increase the number of years of healthy life for all Americans, as well as the quality of life of those years. As women grow older, certain behaviors, health choices, and social support can affect their long-term health and well-being. The aging process often involves the loss of family and friends that can affect both physical and mental well-being. Many Missourians report "more dependence" in activities of daily living (see Figure 1) and describe their overall mental well-being as "deteriorating" as they age.

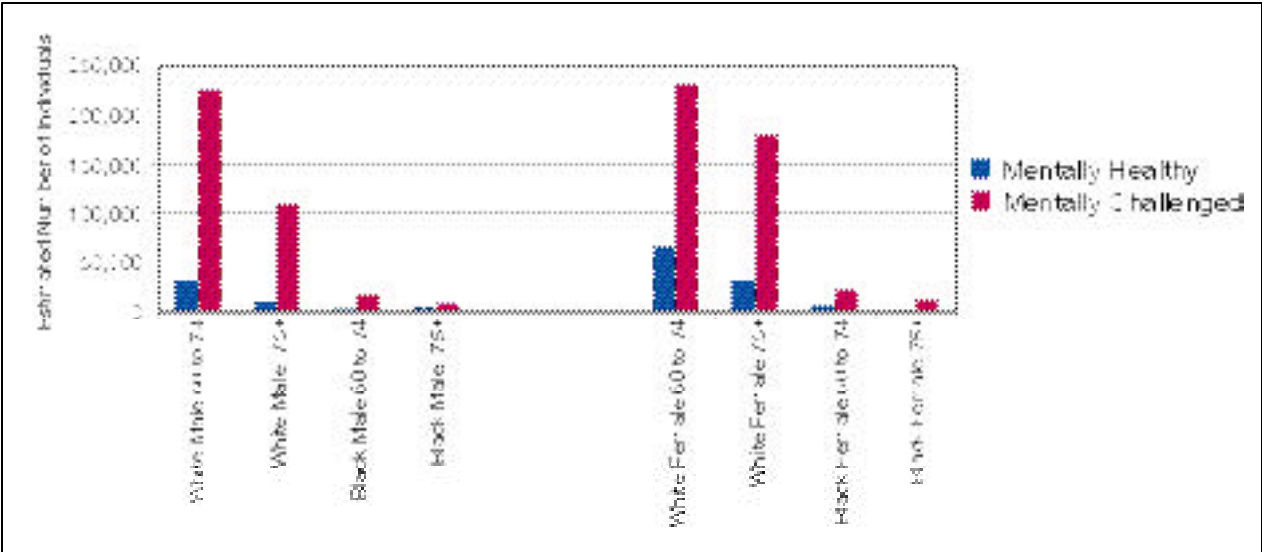
Figure 1. Estimates of Overall Independence of Daily Living by Gender, Race and Age, Missouri, 1999



Source: Missouri Aging Survey, Missouri Department of Health and Senior Services, 1999

According to the 1998 Missouri Behavioral Risk Factor Surveillance System, there are an estimated 240,000 Missouri women between the ages of 60 to 74 and 160,000 women over the age of 75 who report being mentally challenged (see Figure 2).

Figure 2. Estimates of Overall Mental Well-Being by Gender, Race and Age, Missouri, 1999



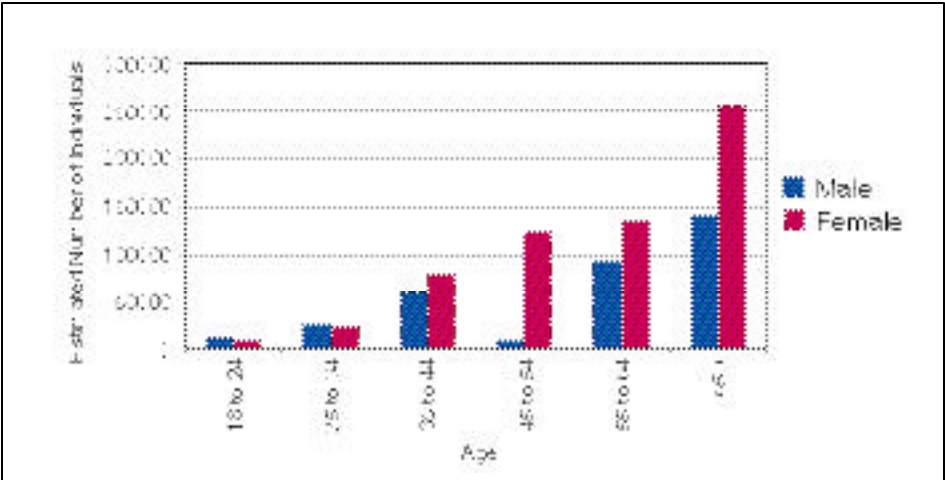
Source: Missouri Aging Survey, Missouri Department of Health and Senior Services, 1999

Arthritis

According to the National Women’s Health Information Center, more than one in five women has arthritis, a disease that is 60 percent more common in women than men. Arthritis means “joint inflammation” and includes a variety of diseases and conditions, including osteoarthritis, rheumatoid arthritis, fibromyalgia, lupus, childhood arthritis, gout, bursitis, Lyme arthritis, and carpal tunnel syndrome. Arthritis is the most common cause of disability in the United States and drastically impacts the quality of life for millions of Americans. Early diagnosis and appropriate arthritis management is key to reducing the burden of this disease.

Women of almost every age group suffer from arthritis more than their male counterparts. In Missouri, the number of women age 65 and older who were told by their doctor that they have arthritis is almost two times the number for women in the 45-54 age group (see Figure 3). “One of the best things that people with arthritis can do to reduce the pain and symptoms of arthritis is exercise. Exercise should be vigorous enough to strengthen muscles and improve cardiovascular health.” (Marian Minor, PhD, PT, Associate Professor of Physical Therapy, University of Missouri)

Figure 3. Number of Missourians Who Have Been Told by a Doctor That They Have Arthritis by Gender and Age Group, Missouri, 1998



Source: Missouri Behavioral Risk Factor Surveillance System (BFRSS), Missouri Department of Health and Senior Services, 1998

From A Public Health Perspective

Issues associated with aging are challenging, complex, and often overlooked. As the number of older Americans continues to increase, more resources need to be made available to address these issues. Public health’s focus on prevention and its promotion of healthy lifestyles and healthy communities are intended to ensure that people are healthy at all ages. The real benefits of regular physical activity, low-fat and high fiber diets, and no tobacco use may well mean increased years and quality of healthy life.

## What Can You Do?

- Get regular checkups and talk to your health care provider about any mental health concerns you may have.
- Eat a healthy, balanced diet that includes at least five servings of fruits and vegetables each day.
- Be physically active by engaging in activities such as gardening, walking, swimming, yoga, or golf.
- Don't smoke.
- If you drink alcohol, do so in moderation.
- See your doctor if you think you have symptoms of arthritis.

These include:

- ✓ Swelling in one or more joints.
- ✓ Morning stiffness lasting more than 30 minutes.
- ✓ Joint pain or tenderness.
- ✓ Not being able to move a joint in the normal way.
- ✓ Redness or warmth in a joint.
- ✓ Weight loss, fever, or weakness and joint pain that can't be explained.
- Engage in moderate physical activity like swimming or walking.
- Maintain a healthy weight.
- Nurture your mind and body through a healthy outlook and lifestyle:
  - ✓ Stay in touch with family and friends.
  - ✓ Be engaged in activities in your community.
  - ✓ Keep a positive attitude and do things that make you happy.
  - ✓ Sign up for that class you've always wanted to take - art, exercise, writing, computer.
  - ✓ Focus on what makes you happy - and do more of it.
  - ✓ Make time for family activities and traditions.

## For More Information, contact:

**Missouri Department of Health and Senior Services**  
**Division of Chronic Disease Prevention and Health Promotion**  
**Arthritis Program**  
Phone: 573-522-2879  
Internet: [www.dhss.state.mo.us](http://www.dhss.state.mo.us)

**Missouri Department of Health and Senior Services**  
**Division of Senior Services**  
Phone: 800-526-3626  
Internet: [www.dhss.state.mo.us](http://www.dhss.state.mo.us)  
Elder Abuse and Neglect Hotline: 800-235-5503

**Missouri Department of Health and Senior Services**  
**Division of Nutritional Health and Services**  
Phone: 573-526-5520  
Internet: [www.dhss.mo.state.us/MissouriNutrition](http://www.dhss.mo.state.us/MissouriNutrition)



**National Institute on Aging Information Center**

Phone: 800-222-2225

**National Institute of Arthritis and Musculoskeletal and Skin Diseases**

Phone: 301-496-8188

Internet: [www.nih.gov/niams](http://www.nih.gov/niams)

**American Association of Retired Persons (AARP)**

Phone: 800-424-3410

Internet: [www.aarp.org](http://www.aarp.org)

**National Eldercare Locator**

Phone: 800-677-1116

(Locating information for Area Agencies on Aging)

**Arthritis Foundation**

Phone: 800-283-7800

Internet: [www.arthritis.org](http://www.arthritis.org)

**National Center for Chronic Disease Prevention & Health Promotion**

Phone: 770-488-5820

Internet: [www.cdc.gov/nccdphp](http://www.cdc.gov/nccdphp)